

THE BRICKVILDER

VOLUME XXIII

NUMBER 4

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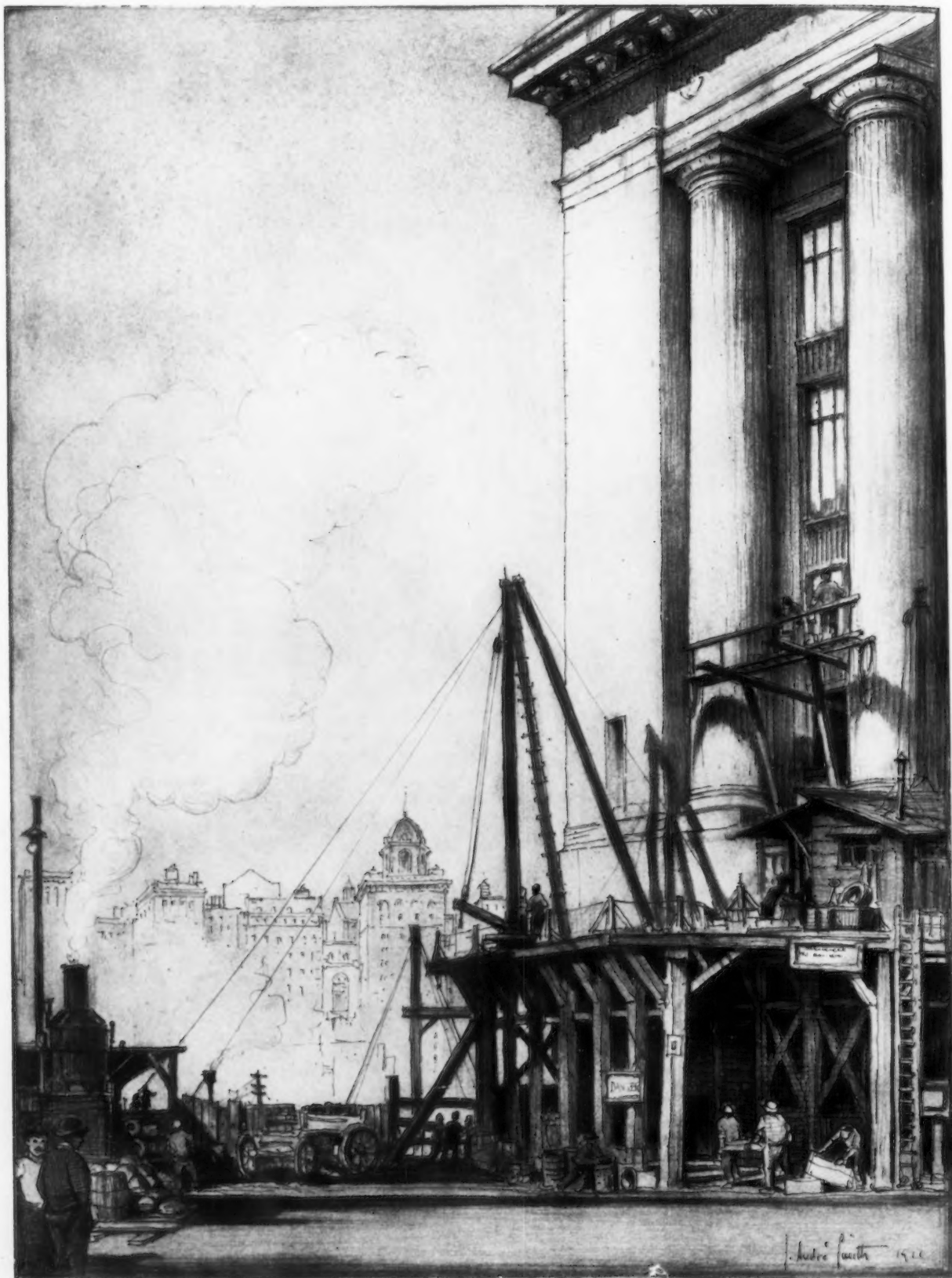
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PUBLISHED MONTHLY BY
 NEW YORK, ROGERS AND MANSON COMPANY, BOSTON.
 ARTHUR D. ROGERS, RALPH REINHOLD, RUSSELL F. WHITEHEAD
 PRESIDENT & TREASURER, VICE-PRESIDENT & BUSINESS MANAGER, SECRETARY & MANAGING EDITOR
 ENTERED AT THE BOSTON MASS. POST OFFICE AS SECOND-CLASS MAIL MATTER, MARCH 12, 1892
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RENDERED COMPOSITION BY J. ANDRÉ SMITH.

THE BRICKVILDER

VOLUME XXIII

APRIL, 1914

NUMBER 4

The Private Library.

By H. T. BOTTOMLEY.

A MAN'S house has been likened to his cloak — both should fit him well and be suited to his needs and the circumstances of his life. A good tailor will make a garment neither too large nor too small, and a good architect will take care to fit a house to the needs of his client. The more nearly a house, and consequently every room in that house, is adapted to the requirements of the man for whom it is built, the more perfect it will be as a work of art.

A library, above all rooms, should be the expression of the individuality of its possessor. Here a striving for effect or originality, so often disconcerting in the extreme, is particularly out of place. This should be the room in a house where repose, simplicity, and quiet are to be found; where the parts are all beautiful, with a certain sobriety in the furnishing and ornamentation, as if the owner respected the quality of his books and esteemed the brilliant assemblage of famous guests ranged within his walls. In planning a library the aim should be to attract, not to startle.

We will consider the private library from two points of view: design and comfort. Perhaps it might be better to put comfort first, for of what use is a room intended for the enjoyment of books unless it is an inviting place that tempts one by its convenience and privacy to spend one's time in it? Nobody ever yet read a book without first making himself as comfortable as possible under the existing circumstances. In the pictures of the early saints, even the self-denying St. Jerome in the Desert rolled a stone under his elbow and propped his back against a lion before perusing the Holy Writ. Since then, times have changed, and we moderns provide ourselves with deep easy chairs, plenty of light, and things to please the eye.

"Without the great and beautiful arts which speak to the sense of beauty, a man seems to me a poor, naked, shivering creature. These are the becoming draperies which warm and adorn him."

In a room primarily intended for study and leisure the treatment of the detail is of the utmost importance, whereas, in one designed for conversation or amusement, the activities of the inmates are far more interesting than the subtleties of the inanimate objects around them. When one is seated alone in one's library, the critical faculties are awake, every detail is seen and dwelt upon, one notices the profile of each moulding, the quality of every curve, either the design and execution is found to be beautiful or it is likely to become intolerable. Looking up from a book or from writing, the eye rests on the decorations, either with infinite content, if they are fine and suitable, or with growing disgust. Therefore the design of a library should be carefully considered in every detail from the main proportions of the room down to the sizes and

shapes of the tables and chairs that furnish it.

The history of private libraries as far back as those of ancient Rome, from which our own are descended, and from which they have inherited many characteristics, is extremely interesting; but it is not the purpose of the present article to discuss this history, except as it offers suggestion to the architect to-day. The accompanying pencil sketch was made from a Roman library discovered on the Esquiline some years ago by Signor Lanciani. Although the book shelves themselves had disappeared before the room was excavated, the charming stucco frieze of delicate pilasters and medallions was still in fairly good condition. The portraits were mutilated, but enough of the inscription remained



Studiolo of Isabella d'Este at Mantua.

to tell what the frieze originally had been. The room measured 23 by 15 feet. The pilasters were 5 feet apart from center to center and the medallions 2 feet in diameter. We know from many sources that Roman bookcases closely resembled modern ones. They were often decorated with different kinds of inlaid wood and finished at the top with a cornice, but instead of our flat books, they were, of course, filled with papyrus rolls. The extent of the shelves and their height was governed by individual taste. This library on the Esquiline was lined with book shelves whose exact character cannot now be determined; but its frieze or an adaptation of it would be very decorative in a modern room.

Although none of the other libraries illustrated approach this one in point of age, some of them are hundreds of years old. After the Dark Ages had very nearly completed the destruction of all libraries and of all learning, the Christian church revived the love of study within its monastery walls. In the cloisters where the brothers congregated to read and to make manuscripts, we find further interesting suggestions for the modern library. So far as the writer knows these have never been materialized.

In the Middle Ages, when books were few, they were kept in locked receptacles in the cloisters, and there the monks "wrote or studied, or conducted the schooling of the novices and choir-boys, in winter and summer alike." In some of the monasteries one side of the cloister was glazed to protect the studious brothers from the elements.

"A charming picture has come down to us of the literary activity that prevailed in the Abbey of St. Martin at Tournai at the end of the eleventh century, when Abbat Odo was giving an impulse to the writing of manuscripts. 'When you enter the cloister,' says his chronicler, 'you would generally see a dozen young monks seated on chairs and silently writing at desks of careful and artistic design. With their help he got accurate copies made of all of Jerome's commentaries on the Prophets, of the works of the Blessed Gregory,' etc."

The cloister, because of the diffi-



Sketch of Frieze Found in Roman Library.

more picturesque than those cloister libraries — the quiet protected walk, the arched openings looking out upon a lovely, carefully kept garden, the desks in the arcades flooded with light.

The seclusion and beauty of such a library must appeal strongly to a lover of books, and it would seem that with our modern inventions for heating houses, a most ideal library on the plan of the cloister-libraries of the monks of the Middle Ages, with a garden in the heart of it and windows all around it, might be arranged in a country house, especially if the court formed by it were left open to the south. The design of the garden has infinite possibilities, but it should undoubtedly be made with paths running through it, for what Montaigne says is most true: "Every place of retirement requires a walk. My thoughts sleep if I sit still; my fancy does not go by itself as when my legs move it; and all those who study without a book are in the same condition."

While the monastery library was developing in the north, the private library strictly speaking, was coming into existence in Italy — collecting rare and beautiful things was a passion with the nobility of the Renaissance, and they planned many beautiful rooms in which to keep them.

One of the most famous of their libraries was the Studiolo of Isabella d'Este in Mantua. Here the lovely

Marchesa gathered together all the treasures of literature and art she could lay her hands on, and here she received her most intimate friends and discussed with them the politics of Italy and the affairs of the whole world. This studiolo has been sadly mis-handled by time; but the exquisite fineness of what remains of the architecture, the pilasters, the cornice and base, and the mural decorations, make it still a lovely room.



Library in a City Apartment.

culty of properly heating it, was not perhaps the most practical of working libraries, as we see from the following couplet found in the fly-leaf of an old book:

"As we sit here in tempest,
in rain, snow and sun
Nor writing, nor reading
in cloister is done."

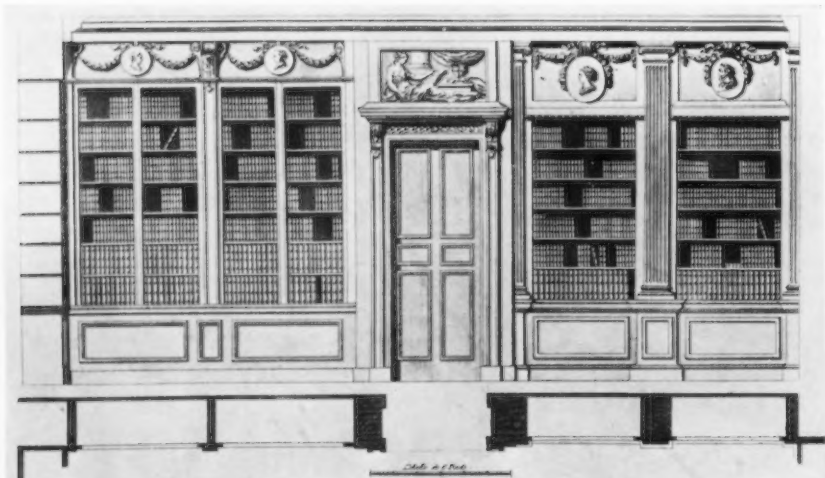
But what could be



LIBRARY IN HOUSE OF GEORGE D. PRATT, ESQ., AT GLEN COVE, L.I.
TROWBRIDGE & ACKERMAN, ARCHITECTS



LIBRARY IN HOUSE OF LEWIS J. POOLER, ESQ., AT TUXEDO, N. Y.
CHARLES A. PLATT, ARCHITECT



Drawing by Boucher showing Two Arrangements of Bookcases.

The Marchesa kept her books behind painted wooden doors, which were undoubtedly made for their safe keeping, but which were a distinct decorative feature of the room.

It is difficult indeed to restore it in imagination to what it was when filled with Isabella's collection of books and rare manuscripts and works of art. Here were her favorite paintings and statuettes, an alabaster organ, a collection of musical instruments. "There were antique bronzes, figures of alabaster and jasper, cabinets of porphyry and lapis-lazuli, murano glass — precious vases — and crystal mirrors." The photograph of the room in its present condition, though charming, gives very little idea of what it was when the scholarly Marchesa entertained the learned men of Italy in it.

But a most delightful Italian Renaissance library, which is to-day in its original condition, is that of the Palazzo Sacchetti in Rome. The writer will never forget the impression received on entering it — that of a most satisfying, dignified, home-like room. It is the principal private room in the palace and is used constantly by the Marchese and his family. At the first glance it is evidently the outgrowth of the need or desire of a scholar, and was planned as a setting for a student. There is no conscious arrangement for the chance visitor or for any sort of entertainment. It is simply a beautiful receptacle for the owner's books and kindred possessions. The room is large and oblong and very high, with three long windows reaching almost to the ceiling and diffusing, between the eye and the dark beams above, a misty light which is reflected again from two large blue globes. The bookcases around the walls, of the same dark wood as the

ceiling, were about 10 feet high and above them was a fine frieze of old maps in blues and greens and soft browns. These maps made a most unusual and interesting decoration. In the center of the room was a massive table of dark oak covered with papers and writing materials, from which gleamed the scarlet seals of several important documents. The floor was tiled and partly covered by some old Oriental rugs.

The whole room gave the effect of great richness of color, due in part, of course, to that cleverest of all colorists, time, but due also to beautiful combinations of materials. We to-day are apt to be timid in this respect.

The illustrations, accompanying this article, have been chosen to represent rooms of widely different character so as to offer as many ideas as possible that may be incorporated in the design and fittings of a modest library. One illustration to which we would call special attention is that of a book stack designed by Miss Hewitt for the private library in Cooper Union, from the original drawing by David Marot. Unfortunately, the room itself is now used more as a storeroom than anything else, which explains its unkempt appearance, but the arrangement is so unusual that permission was asked to photograph it in spite of the condition of its shelves. They are made of a soft brown walnut and are divided vertically into wide and narrow spaces. The narrow ones are carried up to the ceiling and the cornice above them is broken, form-



Book Stack in Private Room in Cooper Union, New York.



Design for a Library by David Marot.



LIBRARY IN PRESIDENT'S HOUSE, COLUMBIA UNIVERSITY, NEW YORK, N. Y.
McKIM, MEAD & WHITE, ARCHITECTS



LIBRARY IN HOUSE AT NEW HAVEN, CONN.
DELANO & ALDRICH, ARCHITECTS



Library in a New York Apartment House.

ing as it were, pilasters of books around the room. About two and a half feet from the floor is an extra shelf which can be pushed in even with the book shelves or pulled out so as to form a table to rest reference books on. This is an excellent practical arrangement for any library.

It is gratifying to see how worthy many of our American rooms of the nineteenth century are of the best traditions which have inspired them. Nothing could be finer than the classic feeling in the library designed by Mr. Platt which is a room unusually fine in every detail.

In marked contrast to it is the charming white room in a city apartment. Here also the detail is well worked out and the decoration is delightful — the furniture, the engravings and paintings, the arrangement of the books. The compartments under the book shelves are very useful for holding manuscripts, etc., that need to be protected from dust. There is a distinction about this room that is very rare.

A simple, work-a-day room designed for a man unusually fond of books, is the library in a coöperative apartment house in New York. The mantel and the old portrait above it are very dignified, and the other three walls of the room are

lined to their full height with severely simple and practical bookcases.

Among these illustrations, which show a variety of styles of suitable bookcases, it should be possible to draw suggestions that will be of value whether the requirements are for only one or more simple bookcases standing against the wall, or a great number of "concealed," that is, built-in bookcases that are finished flush with the walls and are really a part of the architecture of the house.

It is not always possible to carry out the design of a room just as a highly trained architectural sense dictates, and to fit a man's surroundings to his life and habits, is a difficult task; innumerable considerations invariably arise with which compromises must be made. To begin with, few prospective owners of libraries live alone; they have their families, whose varying tastes must be considered, and annoying practical considerations, which cramp and hamper, are almost sure to force themselves forward. But it must be confessed that these considerations are often a blessing in disguise, giving the finished rooms an individuality that is felt to be lacking in many less restricted architectural creations. More than any other important room that is given an architectural character from its design and finish, the library should be considered a practical workshop and study for those who wish to get away from confusion, and as such should be freed from superfluous decoration. Of course too great simplicity may be merely a sign of "a dead imagination," but nowhere is a careful restraint so indispensable as here.

It is necessary in order to have a library worthy of the name that one truly revere its contents. There are libraries for readers as well as libraries for collectors who love the bindings and the editions more than the printed word, but we must have something of the collector's spirit or we shall not think it worth our while to carefully house our books.

Library in a House at Princeton, N. J.
Trowbridge & Ackerman, Architects.

Monographs on Architectural Renderers.

BEING A SERIES OF ARTICLES ON THE ARCHITECTURAL RENDERERS OF TO-DAY, ACCOMPANIED BY CHARACTERISTIC EXAMPLES OF THEIR WORK.

IV. THE WORK OF MR. J. ANDRÉ SMITH.

THERE is in New York a society called "The Digressionists," which is composed of architects who engage themselves in followings of various sorts besides architecture, and their annual exhibition is in many ways one of the most interesting in the city, since it illustrates the profound influence which a knowledge of architecture has upon work in the allied arts. Some of the men are sculptors, others painters or etchers, and still others do work in the minor arts, — bookbinding, jewel and metal working, and other crafts of that sort. Any of these men could unquestionably make a very good living at what we may call his hobby, since each of them shows very marked ability, although every one of them, of course, in a way indicative of the profound regard for order and construction which the practice of architecture teaches a man. One of these men, for example, is Mr. J. M. Hewlett, of the firm of Lord and Hewlett, who has invented a new process in painting (if one can call colored designs painting), on which the only brush used is an air brush; and in this medium he has done much theatrical scenery, as well as exquisite screens and wall decorations. Other men have exhibited much skill as landscape painters, and in all this various work there is probably no branch in which so high a degree of artistic and technical skill is reached as in the work of the men who etch. Architectural subjects are particularly suitable for etching, for they afford a man exceptional chance to display his skill, and are particularly interesting to the architect-etcher, because of the natural sympathy which he would have in his own subject. Etching is a fascinating way of illustrating, not only because of the difficulties of technique which one feels have been overcome in a successful

etching, but also because there is something in the results produced which differs very greatly from those possible in any other medium, even pen drawing with the finest possible pen. The richness and warmth of color which are characteristic of etching would seem to make it particularly an appropriate medium for architectural rendering, but as far as can be recalled there is no one who has used this mode of expression; and when we find an architect who, like Mr. J. André Smith, is an etcher of great ability, one wishes he would devote more of his work, not to the pictorial representation of work already constructed, but would show some of our clever renderers how excellent a means it would be for the showing of work not yet executed. For Mr. Smith is of all our renderers the man whose etchings are the best; and indeed all his drawings have the flavor of etching about them, whether he uses the graver, the pencil, or the colored crayon; and these are about all he does use, for no drawing of the many he has shown has been a water-color.

It is interesting to note in his work how strong the influence of the etching has been; it would seem as if that were the thing he took up first and to which all other means were subsidiary, and without knowing the precise course of his artistic development it would be difficult to prove to the writer that his first and real love was not etching.

He has not the facility to execute pictures of large size in flat and carrying tones, as have so many men. His work consists of exquisite miniatures, rather than wall pictures, and for certain sorts of architectural work where reproduction in a moderate quantity is essential, one would think it the ideal process. It would be hard to make a central spot



Old English Inn.

Etching by J. André Smith.

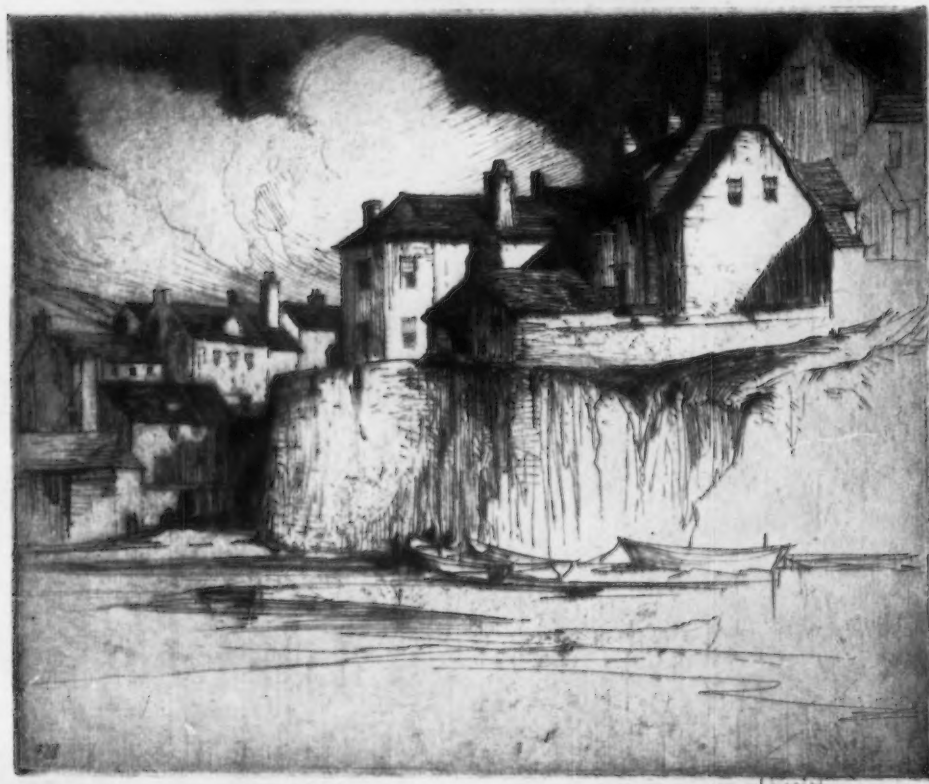
in an exhibition out of one of these things, however well the subject and the execution might warrant it; but to the discerning a more delightful series of architectural drawings was never done than those shown at a recent exhibition of his work, in which over one hundred pencil drawings and etchings were shown together; and not one among them was of unexecuted work, for Mr. Smith is not an architectural renderer primarily, but a designer and etcher; he does renderings of his own work occasionally, and his method is essentially that of an illustrator rather than of an architect. His work has this distinction, however, from the work of the other men who do occasional drawings of architectural subjects, such men, for example, as Vernon Howe Bailey, Joseph Pennell, and Ernest Pexiotto, he knows his architecture thoroughly, and actually draws it, not simply indicating it as they do. Of course the three men whose names have been introduced for purposes of illustration have drawn so much architecture that their indication is exquisite and reasonably accurate, but even so, one can only infer architecture from their drawings; it is not laid down definitely in black and white to be read by every draftsman. Most of the illustrators argue that accurate drawing of an architectural subject destroys, or at least lessens, the artistic quality, reducing the impression of reality except to those men who are themselves architects and are willing to pass their judgment of the picture on an accepted architectural formula. Mr. F. Hopkinson Smith argues in some such way as this, although not precisely in these terms; were he to see a series of drawings and etchings by Mr. André Smith, he would, I think, be convinced that the most pre-

cise architectural drawing can be combined with illustrative indication of shadows and surfaces without at all lessening the interest of the drawing to the general public, and greatly increasing it to the architect, since while the picture interests the architect as well as the layman, the architecture is of equally important interest.

Color is not Mr. André Smith's favorite means of expression, only two of the drawings illustrated in this article are anything but black and whites, and those two, the sketch for a country house and the sketch of a public building in process of erection (see frontispiece) are really in method black and whites, since his shadows are not variations of tone, but real blacks, and color is applied only on the lighted surfaces. The illustrations in this number are thus essentially black and white drawings, and of three different subjects, two pencil drawings of Florence, two etchings, and two drawings made in this country, and out of the whole six, after all, only one is an architectural rendering in the sense that a rendering is a drawing made to show how a proposed building will look; this is the drawing of the little country house.

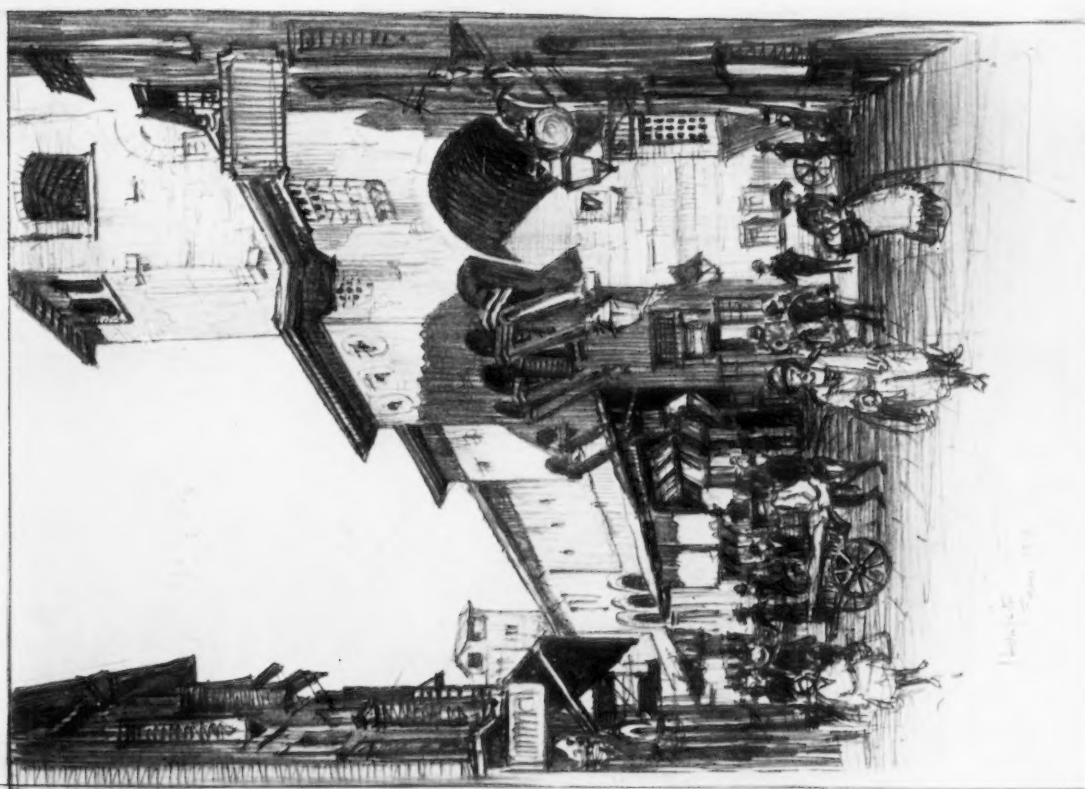
The pencil drawings of Florence are among the most beautiful travel studies that an architect has ever made, not only because of their drawings of architectural detail, but also because Mr. Smith has chosen his composition with an eye so completely a painter's, and has seized upon the exact moment in each when the lighting was most interesting. That of the entrance to the Ponte Vecchio, for example, has a fascinating shadow thrown by the buildings on the opposite side of the street, and the time of day which made the drawing of this detail exceedingly diffi-

cult, would also of course greatly enhance its pictorial interest. The drawing of the Loggetta Vasari is much less surprising, but not less interesting, since the picture was made apparently at such a time of day when no sunshine was able to enter the narrow streets, and all the light was reflected, and the fact that Mr. Smith has been able to work an all over tone over the entire surface without the result being uninteresting, is quite as much an achievement as being able to appreciate a particularly picturesque time of day. Of the etchings the writer feels himself unable to say very much, since a lack of knowledge deters him from attempting an appreciation of technical merits and proc-

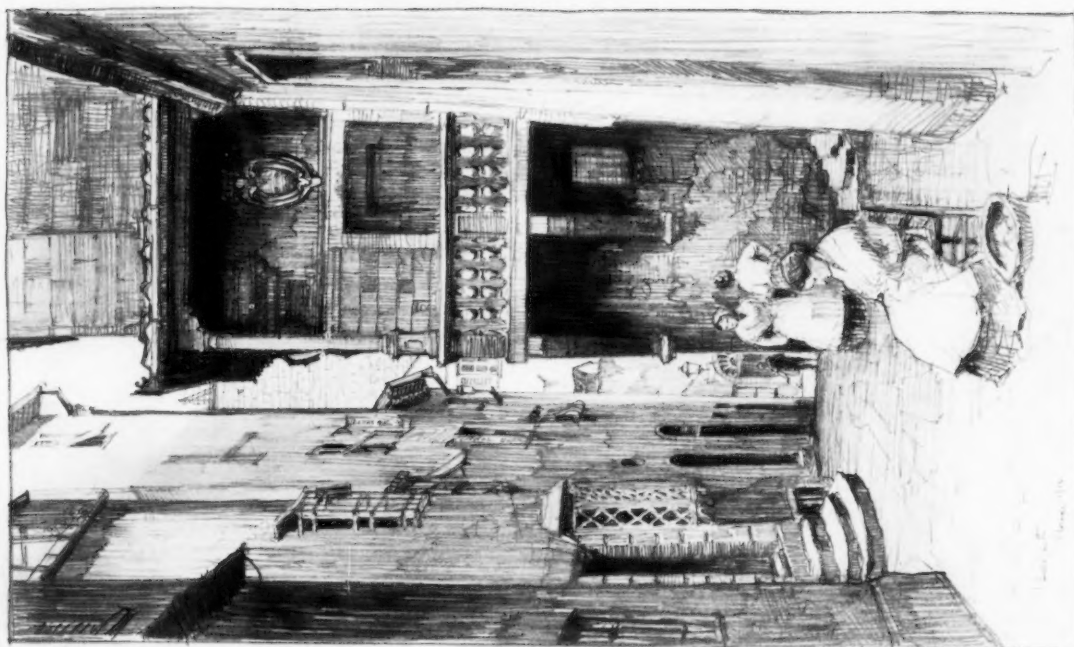


Robin Hood's Bay.

Etching by J. André Smith.



THE APPROACH TO PONTE VECCHIO, FLORENCE



LA LOGGETTA VASARI, FLORENCE

PENCIL DRAWINGS BY J. ANDRÉ SMITH

esses, but they seem of unusually interesting character, both bold and delicate, with a delicious indication of broken surfaces, and great ability to enrich plain surfaces without detracting from their simplicity. The two architectural renderings have apparently had a basic all over tint on them, there are no whites left; the drawings have then been made in pencil with considerable use of colored crayons, and the blacks thrown in, in the case of the country house with conte crayon, and in the drawing of the public building in the course of erection, with ink, and the whole drawing is then varnished. They are of unusual mellowness of color, and in no wise brilliant, but extremely restful, and in spite of their general calm treatment are of much vigor and strength.

It is impossible to show in six examples how great a variation in treatment is possible within the rather narrow boundaries that Mr. Smith has set for himself; it would

need thirty examples to begin to give an idea of the tremendous variety of effect possible to him in black and white. His renderings range from the quietest of low-toned drawings of subdued and twilighted streets to a blaze of sunshine in the open country, with detail almost utterly lost in harsh black shadows; but through them all we feel the same skilful and architectural handling of the theme, and while it would have perhaps been more interesting to have shown more of Mr. Smith's renderings for tentative buildings, as a matter of fact it is so much more the other side of his art which interests him, and so many of his drawings have been made, either as travel studies or etchings, that it has seemed fitting to select those which are reproduced here, especially since they illustrate a way of working almost completely different from the usual method employed and which will likely suggest a wider range of mediums for the delineation of architectural subjects.



A SMALL COUNTRY HOUSE
COLORED CRAYON SKETCH
BY J. ANDRÉ SMITH

DISTINCTIVE AMERICAN ARCHITECTURE



A SERIES OF ILLUSTRATIONS
OF THE MOST NOTABLE
WORK OF THE YEAR WITH
APPRECIATIVE TEXT BY



MONTGOMERY SCHUYLER

IT IS fortunate for the student of architecture, beset with the task of trying to disentangle individualities from "firms," that the church of St. Thomas in New York, of which the plan and "lay out" have been so clearly understood to be the work of Mr. Cram, of the late firm of Cram, Goodhue, and Ferguson, and of which the working out and detail have been with equal clearness understood to be the work of Mr. Goodhue, should be so swiftly succeeded by the Chapel of the Intercession, which is with equal clearness understood to be Mr. Goodhue's individual work. The fact must be a comfort to the individual architect of this latter and latest work. It is certainly a comfort to the commentator.

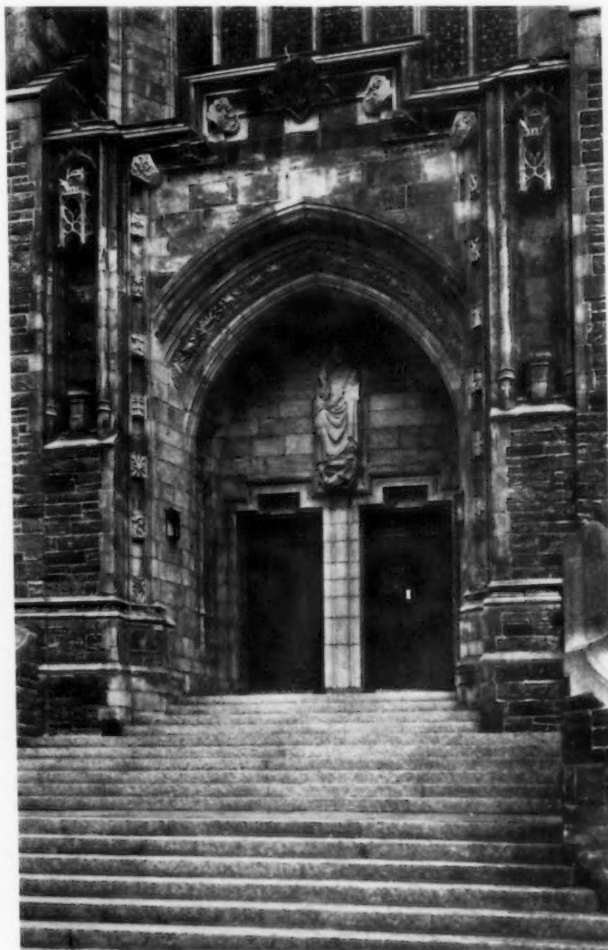
For the reader who is not a New Yorker, and who therefore is not "charged with knowledge" of the "paramountcy" of Trinity Church, in matters relating to ecclesiology and to church building, from the latter part of the seventeenth century to the beginning of the twentieth, in the city of New York, the very word "chapel" may denote a misconception which it is worth while to clear up. "Chapel," when it is not used, as it is in England, to denote a place of worship which signifies a dissent from the religion of the state, denotes an accessory and subordinate place of worship of the mother church, which has its main seat elsewhere. That is the case with the new Chapel of the Intercession. It is equally the case with the other "chapels" of the great historical foundation of Trinity Church. As no

Chapel of the Intercession Trinity Parish, New York, N.Y.

Bertram Grosvenor Goodhue; Cram, Goodhue & Ferguson, Architects.

one more readily than the architects who have been the creators of the "chapels" would allow, the architectural as well as the ecclesiastical primacy and paramountcy of Old Trinity, commanding the vista down Wall street from Broadway, have always, since the consecration in 1846 of Richard Upjohn's rededication of the mother church, remained unchallenged. But it was by no means always so. When the elder John Adams visited New York on his way southward in 1774, the lion of the architecture of Trinity was by no means Trinity itself, standing where it

still stands at the head of Wall street and from all accounts a shabby and negligible shed of a "meeting house," shortly to be demolished by fire in the course of the British occupation, but the new "chapel" of St. Paul, designed by the now almost irrecoverable McBean, in which Washington subsequently had a pew, and upon which the said John Adams delivered a series of more or less inept architectural remarks. Similarly, and subsequently in fact, in the first decade of the nineteenth century, when some now forgotten genius in the way of real estate promotion and development undertook to convert the despised swamp of "Lispenard's meadows" into the "court end" of Manhattan Island, and succeeded in so converting them by the laying out of St. John's Park and the building of St. John's "Chapel," of which the putative and possibly the real architect was that John McComb who was the putative but certainly not the



Detail of Main Entrance.

real author of the contemporaneous City Hall; the new "chapel" effaced in public appreciation not only the elder St. Paul's, but also and still more the shabby old mother church itself. So when the indurated New Yorker comes upon this new and stately church, laid out upon an ample scale, something like two hundred and seventy feet by one hundred feet in extreme dimensions,—a church

which seats some 1,400 people upon its main floor, without any makeshifts or addenda of galleries or side-chapels,—he is not startled by hearing it called a "chapel," when it is understood that it is a "chapel" of Trinity. But he forgives the jar which the nerves of the stranger undergo at such a designation of such an edifice.

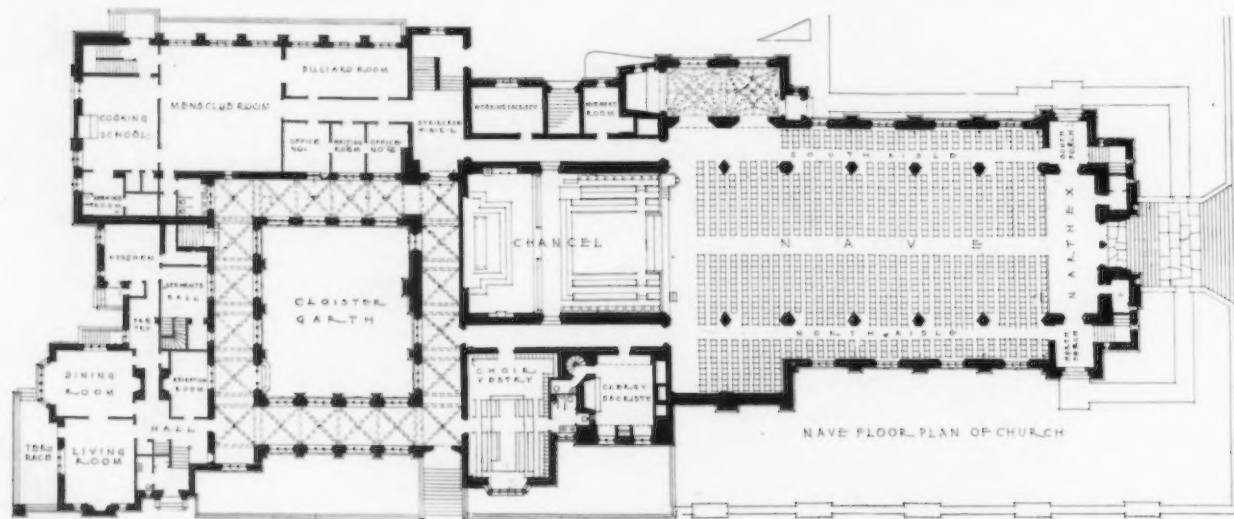
And here again, and at the outset, those to whom the new church gives most artistic pleasure cannot fail to do homage to the past of Trinity Parish, which has enabled him to achieve this success, unique on Manhattan Island, where every new edifice is so cabined, cribbed, and confined by the cost of land and the occupation of every available square foot of the surroundings of an eligible site as to deprive the building erected upon it of all the dignity of detachment and isolation. The enormous advantage the new church possesses in this respect it derives from the fact that it stands upon the ground providently preempted, a generation or two ago, by Trinity Church for Trinity Cemetery, as a relief to the overcrowded grave-



Cloister Garth.

yards of the parish "down town" at a time when it seemed that the actual site in the neighborhood of 150th street and Broadway might remain not merely suburban but rural for many generations yet to come. How fallacious that expectation was the visitor to the new church has only to look around to see, in the multitudinous and towering outlines of skyscraping apartment houses. Nor

has the providence of Trinity been manifested alone in the "preemption" and reservation of the ground. No suburban cemetery can have been more judiciously guarded than this was from vulgar invasion by architectural device. The architectural device was that of the late Frederick Clarke Withers, one of the most sensitive and cultivated of the Victorian Gothic designers. He sharply set off the sacred precincts from those open to ordinary occupation by a massive wall, of the native "trap rock" of which Manhattan Island is composed, punctuated at due intervals by piers in which there was judiciously introduced "wrought work" in a more tractable material. In effect, though not in tint, the same combination, and giving the same contrast, as appears in the choice of material for the new church to which all his so long antecedent labors now appear in the light of a promise and a setting. 'Tis true, 'tis pity, and pity 'tis, 'tis true, that the dominating feature of his otherwise unpretentious work has been forced to give way to the march of improvement. I do not know



Ground Floor Plan.

Chapel of the Intercession, New York.

Bertram Grosvenor Goodhue; Cram, Goodhue & Ferguson, Architects.



WEST FRONT

CHAPEL OF THE INTERCESSION, TRINITY PARISH, NEW YORK, N. Y.
BERTRAM GROSVENOR GOODHUE; CRAM, GOODHUE & FERGUSON, ARCHITECTS



Pulpit and End of Choir Stalls.

the chronology of the improvements. But it must have been after the preëmption by Trinity of the site for its new suburban cemetery that the city of New York determined to extend Broadway through the center of it. The bisection of the cemetery thus accomplished, Mr. Withers undertook to mitigate by a suspension bridge across Broadway, the bridge remaining until its demolition only a few years ago, one of the most exemplary achievements in New York in the way of a decorative treatment of a practical necessity. The demolition of the bridge in fact made room for the new church. That nobody who contemplates the church can regret the destruction of the bridge, seemly and picturesque as the bridge was, is one of the strongest tributes that could be paid to the later architect.

There can really be no question of the use the later architect has made of his unequalled advantages and opportunities. Among his advantages is the rare one, to all appearance, of not having been controlled or limited in any expenditure required to carry out his conception of what this church ought to be. It were unprofitable to inquire into the actual cost of this beautiful and most successful work. I may have been told, but I really prefer not to know. It is enough to know that there is nowhere any evidence of "skimping." He has, in the first place, used, without abusing, his rare chance of taking advantage of his ample area. He has "expatiated" in laying out a complete parochial "plant." The plant

consists of the church proper, of a parish house apparently destined, though that is the concern rather of the rector than of the architect, to exert a wholesome and efficient civic and social influence upon the life of a neighborhood of which the conditions indicate that, though the work of the new church is by no means among the destitute, or even the necessitous, the church is yet a "chapel" and even a missionary chapel — a chapel *in artibus*, maintained, at least originally, by the contributions of the faithful elsewhere. And, naturally, it includes a rectory. These various requirements are accommodated upon the ample area provided and gracefully "accommodated" to one another. A connecting link which is a necessary part of the accommodation one regrets to find not sufficiently exhibited in the photographs. That is the quadrangular and nearly square cloister which intervenes between the church and its dependencies. Though here by no means designed for the promenade of cloistered and tonsured monks, it has the air of seclusion from common and mundane affairs which belong to the traditional notion of a cloister. At any rate, it is a feature which a sensitive architect could not omit in a scheme of this kind if he could by any means find it practicable to include it, and it is very delightfully treated.

But rectory, parish house, cloister, are each and all subordinate and accessory to the church itself, much as by their grouping they contribute to detaching and isolating it as well as completing its effect. The church is "the thing." Its "orientation" is fortunately correct. The West front, at the extremity down the moderate slope of the hillside, is the proper West front. The "East end," a proper and Anglican flat East end, is really the East end, up the hill. The slope, though slight, is sufficient to indicate if not to require some emphatic feature which shall



Choir Stalls and Organ in Chancel.



INTERIOR LOOKING TOWARD CHANCEL.

CHAPEL OF THE INTERCESSION, TRINITY PARISH, NEW YORK, N. Y.
BERTRAM GROSVENOR GOODHUE; CRAM, GOODHUE & FERGUSON, ARCHITECTS

serve the purpose of securing to the eye the stability and repose of the edifice by visibly anchoring and spiking it down, as it were, to the acclivity. It seems to have been this feeling which determined the situation and the design of the tower at what would be a transept if the church did not essentially consist merely of nave, aisles, and chancel. The effect of weight and anchorage, which has been denoted as necessary to the chief architectural function of this tower, has been kept in view in its design. It is a simple, four square, unbuttressed mass, solid and unbroken up to the belfry stage, or broken only by the crossing bands of lighter tint which in the lower part conform to principal lines which are continued on one side or the other along the adjoining walls. The simplicity is in the upper stages carried to a degree unusual in Mr. Goodhue's work, but to an excellent effect in emphasizing the relation of tower to church. The battlemented parapet itself is severely plain, denying itself even the customary pinnacles, of which the place is advantageously taken by the single central *flèche* which dominates the four square mass more effectively than would the four equal members at the angles which Ruskin has compared, in King's College Chapel, to a table upside down with its legs in the air. The interior is given up below to the organ loft, opening upon the two bays of what may be called a rudimentary transept, to the visual as well as acoustical advantage of the elaborate and successful design of the instrument, while the corresponding projection across the nave is given to a lady chapel.

The position of the tower leaves the West front as a simple and symmetrical composition, with no features but the central doorway and the central window, and excepting these no openings but the slits which rather punctuate and emphasize the flanking expanses of wall. The central feature in fact makes up a single feature in two stages, effectively united by the notably ingenious framing of them between buttresses receding from the plane of the wall below, while the frame is completed across the top by an equally effective blind gallery, relieved against the upper wall. The rectilinear canopy of the doorway with its flanking niches is an effective preparation for the curvilinear and flowing tracery of the great window above. In design, in scale, and in adjustment all this detail is equally successful and satisfactory, and makes up one of the most admirable of our church fronts in its kind, the effect, as everywhere, being much enhanced by the detachment and isolation accruing from the spacious setting.

Equally effective, in its very different and yet quite congruous way, with the simplicity of the front is the picturesque and harmonious grouping of the *multipartite* flank. The ranged arcade of the four great clerestory windows, in itself a feature as simple as it is noble, is succeeded by what we have called the rudimentary transept, by the mass of the tower, by the projecting gable of the parish house, by the cloistral arcade which connects this with the rectory, and finally by the rectory itself. Evidently there is here a sufficient and even a dangerous variety. The danger is that the variety will become a miscellany, that it

will "scatter" and fail to produce a total effect. This danger has been obviated by various devices which are worthy of study, as indeed much study has obviously been spent upon them, but perhaps mainly by the skill with which the "cordons," composed of belts of a lighter tint than the field of the wall, have been introduced to tie the parts together and to connect them into a whole.

The interior is worthy of the exterior, and here there is even more of the sense of spaciousness and amplitude, which, to the stranger, makes the name of "chapel" seem so absurd a misnomer when applied to one of the largest churches in New York. Here, also, the prevailing impression is rather of simplicity than of complication. The largeness and fewness of the parts of the four-bayed nave, or five-bayed counting the western gallery, of the two-bayed transept, if we may continue to call it so, and of the three-bayed chancel, gain an effect of repose which cannot subsequently be disturbed by all the elaboration that has been applied in the richness of the traceries, in the elaboration of the screen under the western gallery, in the intricate and exquisite wood carving of the choir. You are to note that the treatment of the main structural features is all the while characterized by as much simplicity as their general form and disposition. Only in the vaulting of the lady chapel is there anything that can fairly be called fantastic in the elaboration of the masonry, and here the designer has "treated resolution" to excellent effect. One exception to the rule there may be in the equipment of the inner archivolt of the nave arches, with its separate vaulting shaft continued to the floor, and of the emphasis given to the arrangement by a moulded capital not continued through the other mouldings of the pier. Mr. Goodhue, as all students of his work know, does not at all aspire to the praise of a purist, but the introduction of this abundantly precedented feature suggests the formular element from which the design in general is so delightfully free. Moreover, it seems to detract from the weight and dignity of the mass of the pier to have its inner moulding and the archivolt it carries thus detached and isolated from the mass. But there is nothing like this anywhere else. Another point that may perhaps be marked for animadversion is that the steep hammer-beamed ceiling, which has been decorated in color with great richness of effect where and when it is apprehensible, is so high above the clerestory and so steep that it is only under very favorable conditions of weather that it exerts the influence to which it is entitled. But even if these things be blemishes, they are hardly worth mention — certainly are worth no more than mention — in the presence of a success of ensemble and detail so conspicuous as that of the Chapel of the Intercession. We can pardon those who even prefer it to St. Thomas's, though, indeed, the crowded and hampered site of St. Thomas's makes a comparison with its free standing successor almost impossible and quite inadvisable. It suffices to note the evident fact that the new church is one of the most interesting examples of ecclesiastical architecture in New York, or for that matter in the United States.



ENTRANCE FRONT

SEASIDE BRANCH OF THE WIDENER MEMORIAL SCHOOL, LONGPORT, N. J.
HORACE TRUMBAUER, ARCHITECT

U of M

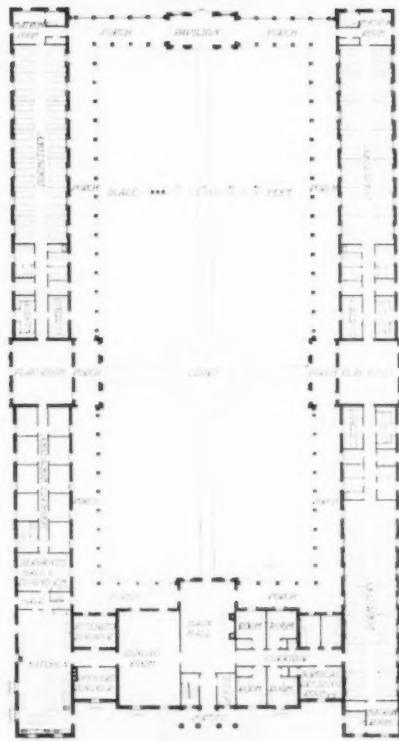
1904



MAIN FACADE



BASEMENT FLOOR PLAN



FIRST FLOOR PLAN



SECOND FLOOR PLAN

SEASIDE BRANCH OF THE WIDENER MEMORIAL SCHOOL, LONGPORT, N. J.
HORACE TRUMBAUER, ARCHITECT

U. of M.



VIEW OF COURT LOOKING TOWARD OCEAN

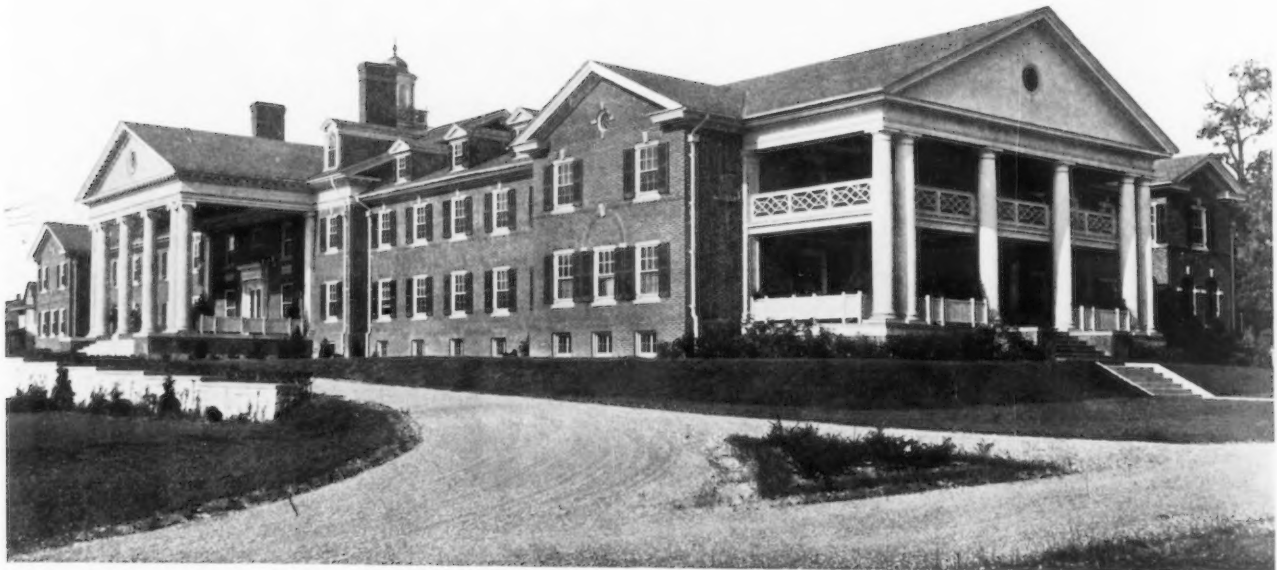


COURT FACADE OF MAIN BUILDING

SEASIDE BRANCH OF THE WIDENER MEMORIAL SCHOOL, LONGPORT, N. J.
HORACE TRUMBAUER, ARCHITECT

U of M

1000



GENERAL VIEW OF MAIN FACADE



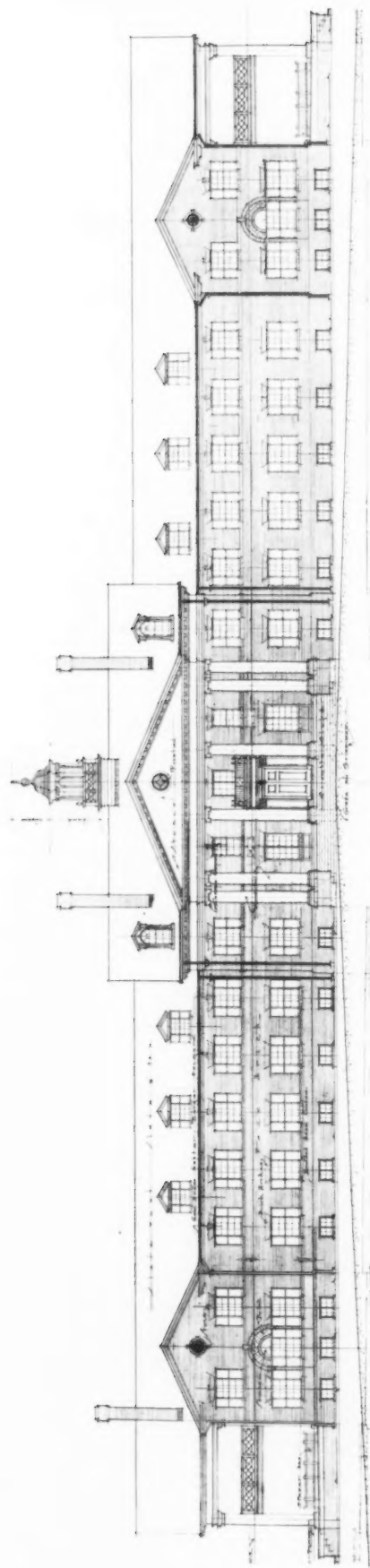
DINING HALL LOOKING TOWARD MAIN BUILDING

THE JOHN DICKSON HOME FOR AGED MEN, WASHINGTON, D. C.
ARTHUR B. HEATON, ARCHITECT

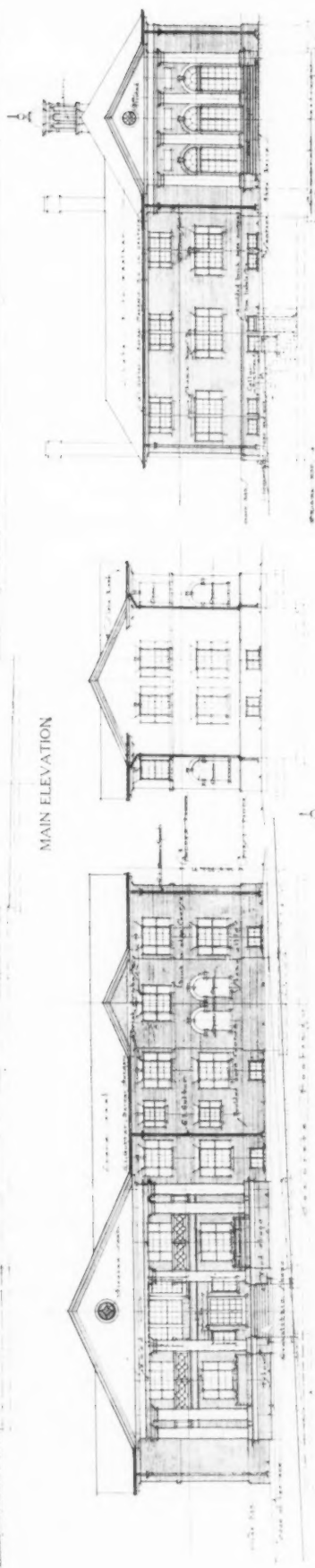
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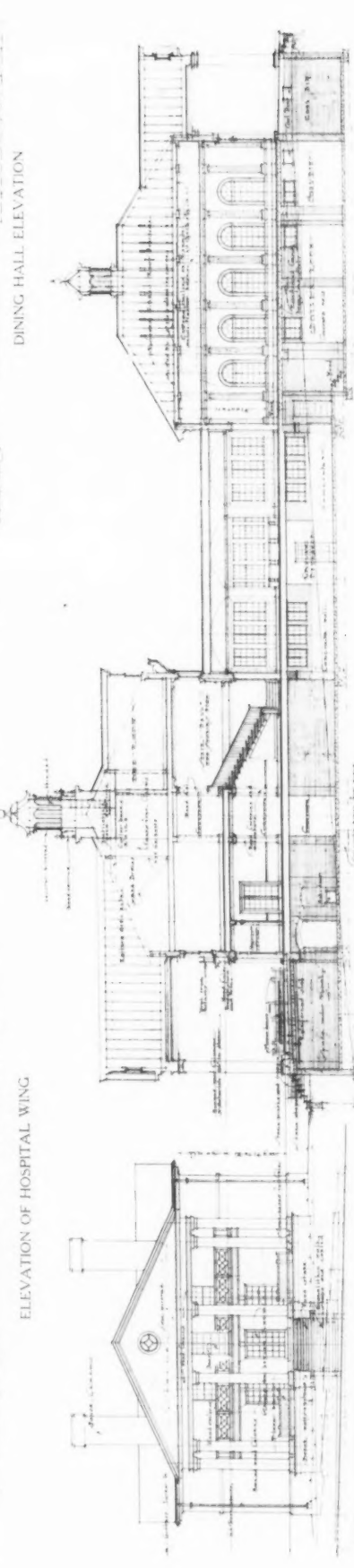
1890



MAIN ELEVATION



ELEVATION OF HOSPITAL WING



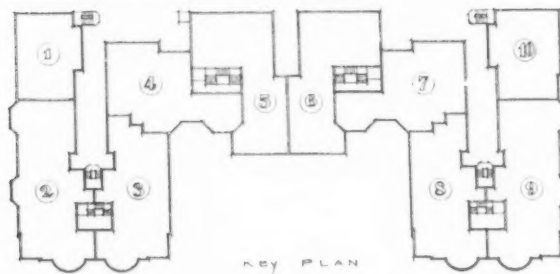
DINING HALL ELEVATION

THE JOHN DICKSON HOME FOR AGED MEN, WASHINGTON, D. C.
ARTHUR B. HEATON, ARCHITECT

U 70 U



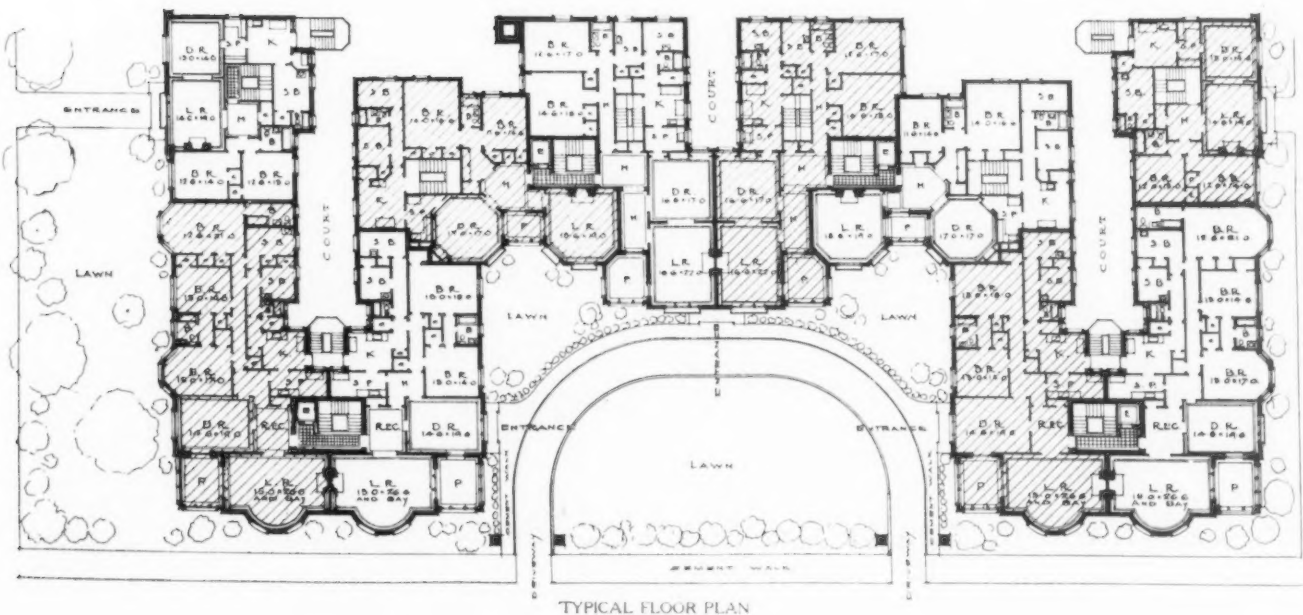
GENERAL VIEW OF MAIN FACADE



KEY PLAN



F PORCH
 BR BEDROOM
 B BATH
 K KITCHEN
 C CLOSET
 H HALLWAY
 SD SERVANTS BEDROOM
 SP SERVICE PANTRY
 P PULL
 REC RECEPTION HALL
 LR LIVING ROOM



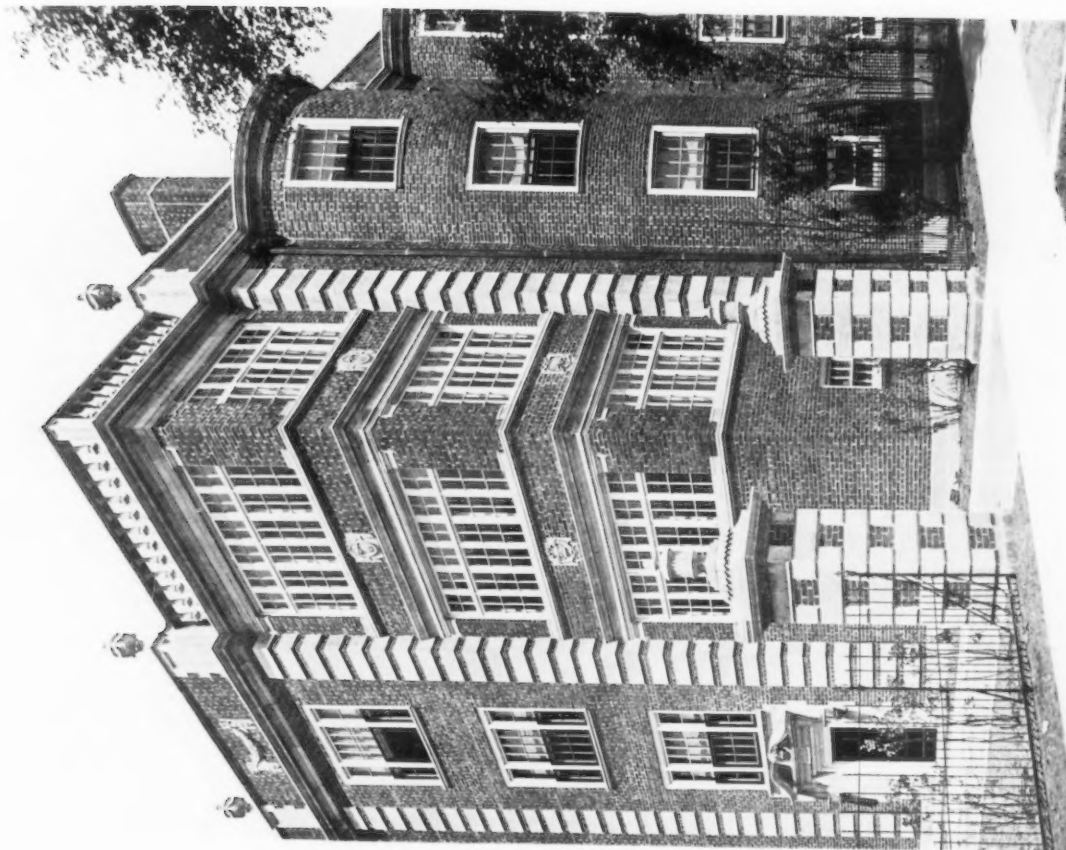
TYPICAL FLOOR PLAN

LOCHBY COURT APARTMENTS, SHERIDAN ROAD, CHICAGO, ILL.

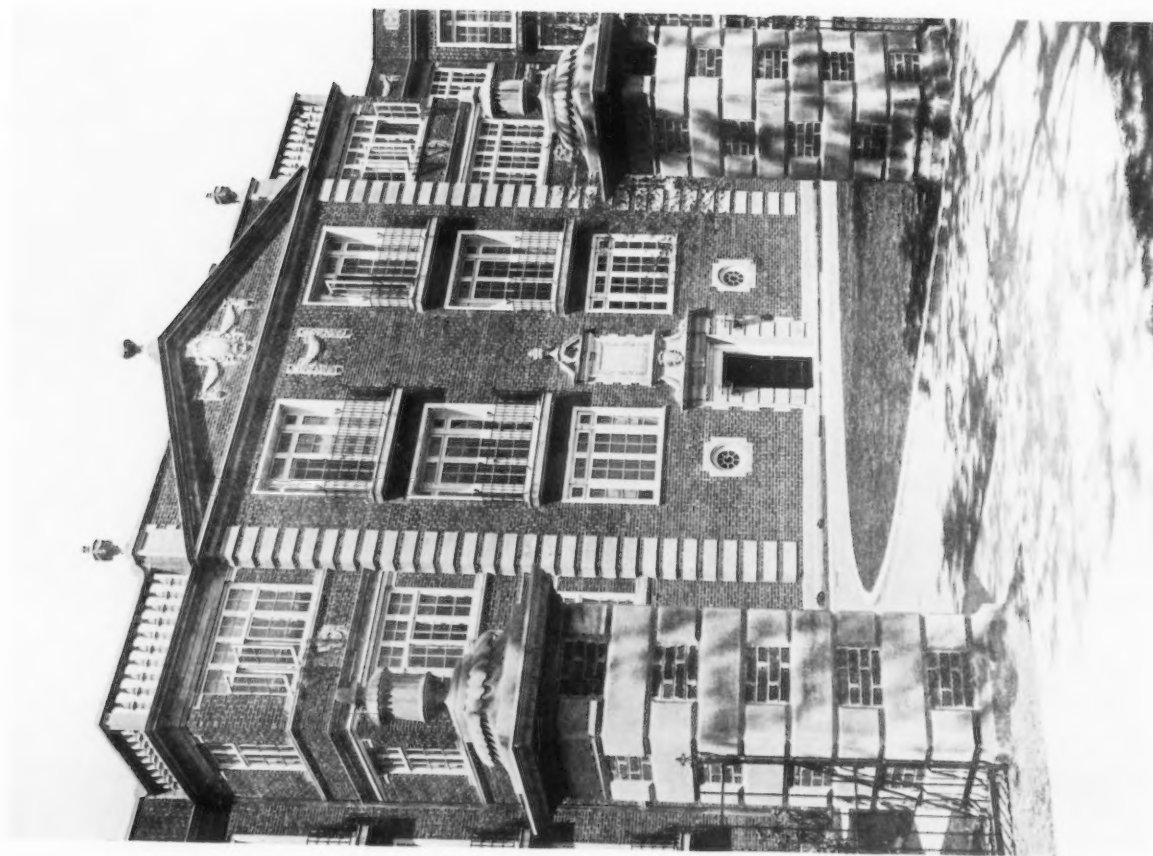
RICHARD E. SCHMIDT, GARDEN & MARTIN, ARCHITECTS

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DETAIL OF PORCHES AND SIDE ENTRANCE

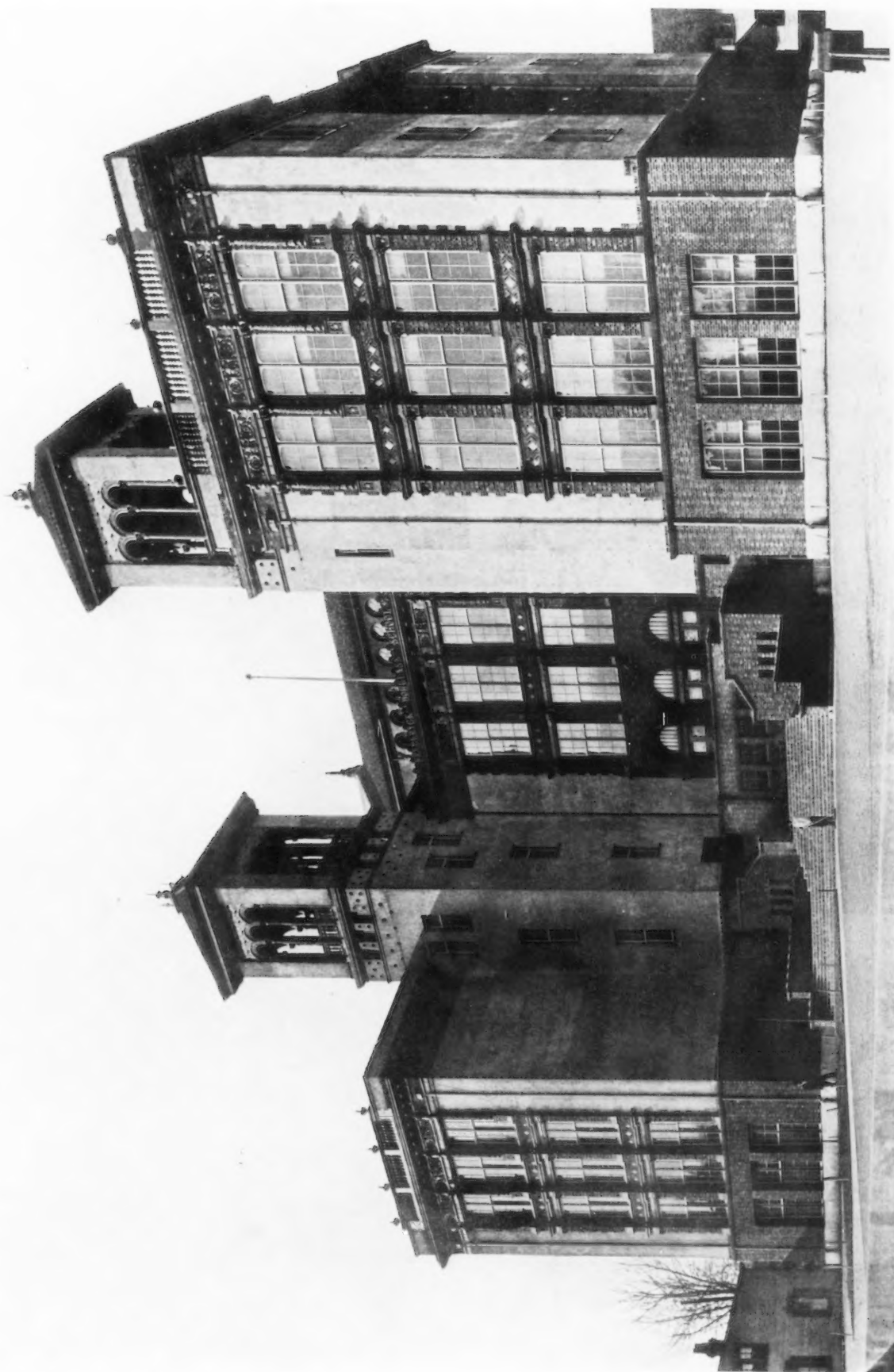


DETAIL OF CENTRAL PAVILION AND ENTRANCE

LOCHBY COURT APARTMENTS, SHERIDAN ROAD, CHICAGO, ILL.

RICHARD E. SCHMIDT, GARDEN & MARTIN, ARCHITECTS

100 M



ENTRANCE FRONT
THE FREDERICK DOUGLASS SCHOOL, WALNUT HILLS, CINCINNATI, OHIO
GARBER & WOODWARD, ARCHITECTS

M 46 U



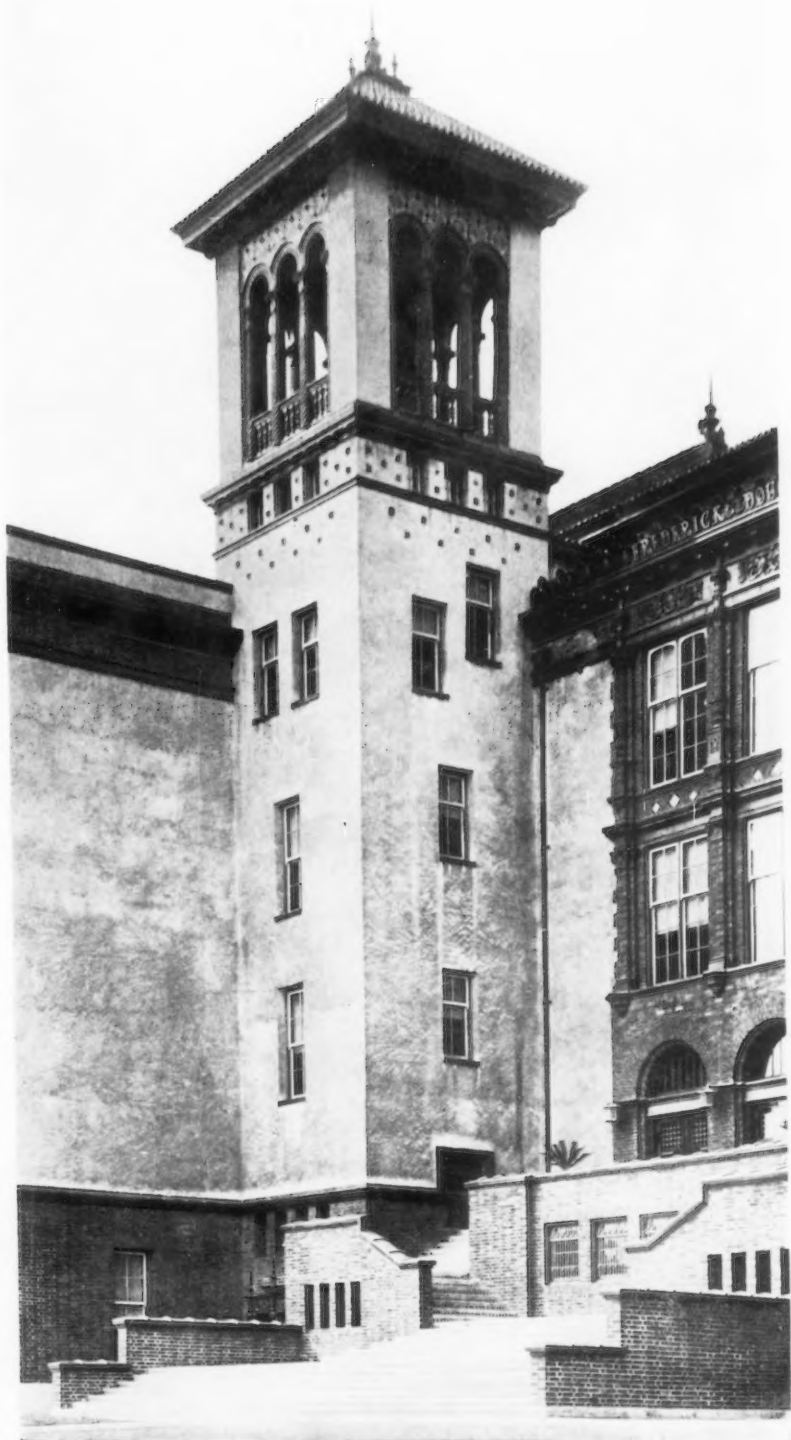
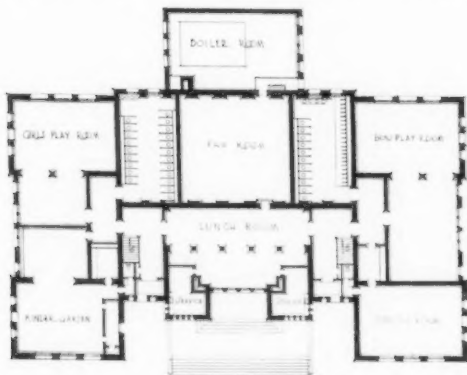
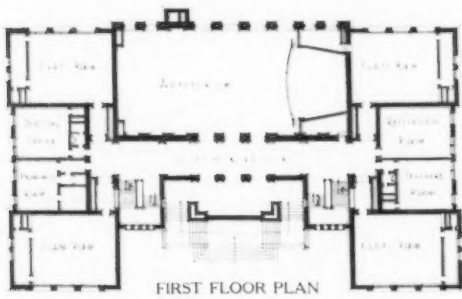
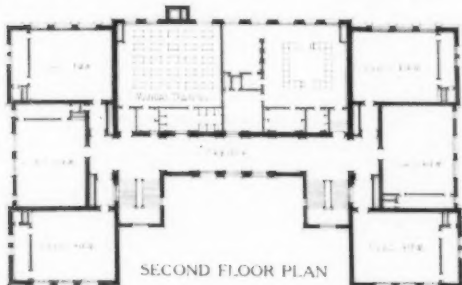
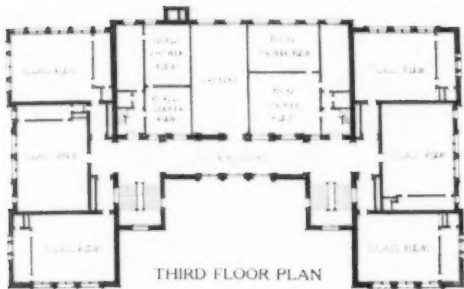
REAR ELEVATION



DETAIL OF MAIN ENTRANCE

THE FREDERICK DOUGLASS SCHOOL, WALNUT HILLS, CINCINNATI, OHIO
CARRER & WOODWARD, ARCHITECTS

104M



DETAIL OF TOWER AND APPROACH

THE FREDERICK DOUGLASS SCHOOL, WALNUT HILLS, CINCINNATI, OHIO
GARBER & WOODWARD, ARCHITECTS

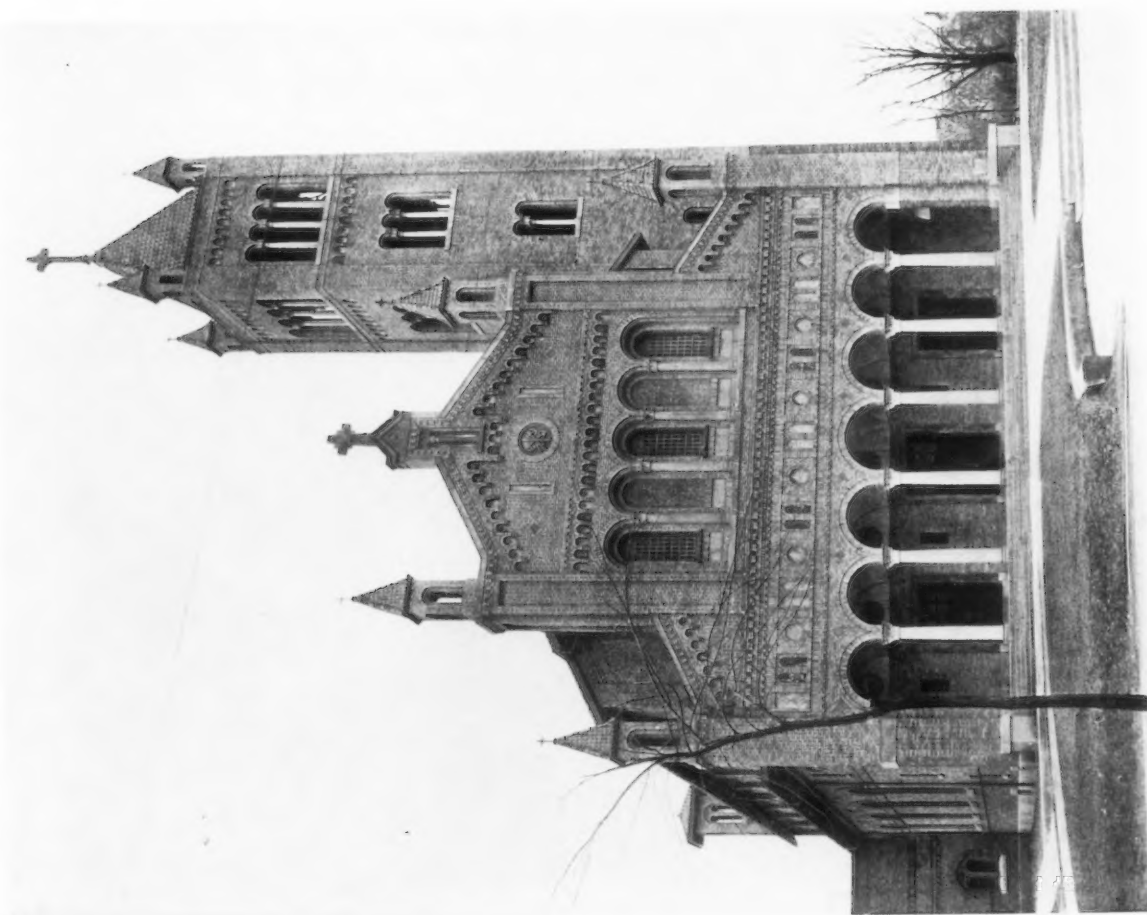
U of M

M 750



PLAN OF COMPLETED GROUP

SS. PETER AND PAUL'S CHURCH, ROCHESTER, N. Y.
GORDON & MADDEN, ARCHITECTS



MAIN FACADE

1000

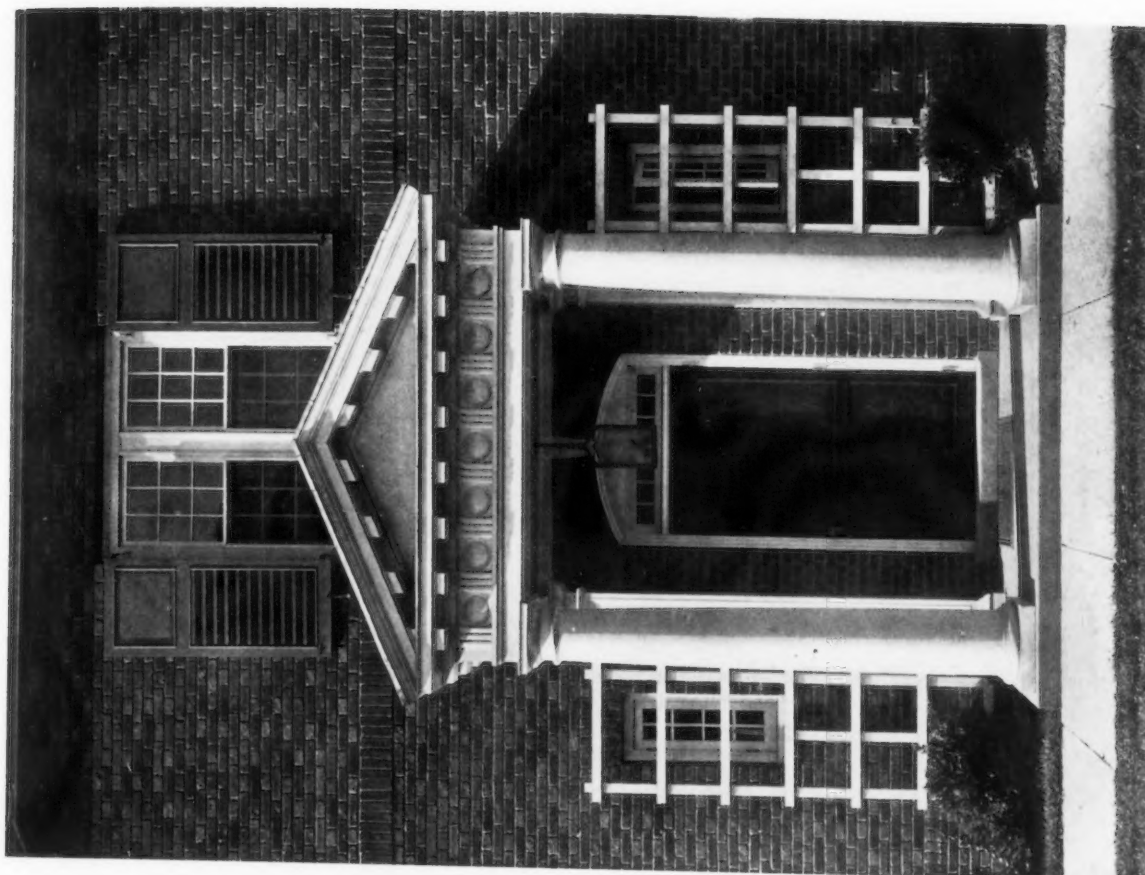


GARDEN FRONT

HOUSE OF ARTHUR P. DAY, ESQ., HARTFORD, CONN.
SMITH & BASSETTE, ARCHITECTS

UOF M

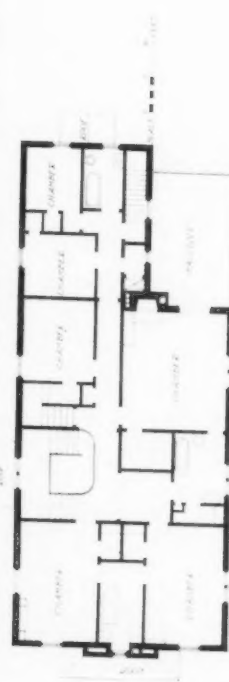
1900



ENTRANCE DETAIL



STREET FRONT



SECOND FLOOR



FIRST FLOOR PLAN

HOUSE OF ARTHUR P. DAY, ESQ., HARTFORD, CONN.
SMITH & BASSETTE, ARCHITECTS

M 40 U



VIEW LOOKING TOWARD HORSE BARN



J

VIEW LOOKING TOWARD COW BARN

FARM BUILDINGS OF PERCY R. PYNE, ESQ., BERNARDSVILLE, N. J.

ALFRED HOPKINS, ARCHITECTS

See page 94 for floor plans

U of M

M 40 U



TEA HOUSE



FARM COTTAGE AND PUMP HOUSE

FARM BUILDINGS OF JACOB SCHIFF, ESQ., RED BANK, N. J.
E. HARRIS JONES, ARCHITECT

U of M

FORM



Farm Buildings, Estate of Jacob Schiff, Esq., Red Bank, N. J.

✓ Modern Farm Buildings.*

CONCLUDING PAPER.

A TREATISE ON THEIR DESIGN, PLAN, AND EQUIPMENT.

By ALFRED HOPKINS.

Architect and Author of the Work, "Modern Farm Buildings."

IN the preceding article on the requirements of farm buildings the writer considered the cow barn in detail, since it is perhaps the most important of the group from the standpoint of sanitation and because it probably presents more difficulties to the designer than any of the other buildings in arranging the floor space and providing for the cattle which on most farms constitutes the important portion of the live stock.

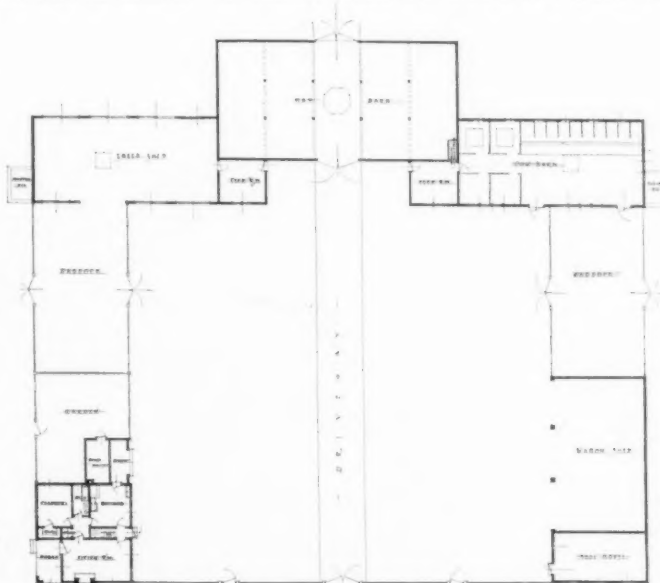
It was specially pointed out that the cow barn should be amply provided with windows to give fresh air in summer and to take advantage of the sun in winter. It will be furthermore found advantageous to fit all the windows with blinds. These should be hooked in and not swung. The interior sash should be entirely removed in the summer time and the building kept dark by closing the blinds. The only way to keep flies out of a barn is to keep it dark — screens are useless. Fig. VII shows a desirable type of window and blind suitable for the cow barn.

The interior woodwork of the cow barn is best painted with enamel paint; white though it soils quickly is preferable for the simple reason that all dirt may be readily

seen. It is a great advantage to enamel the walls and ceiling, though it is better not to paint the cement dado, as this frequently wants more vigorous scrubbing than a painted surface would allow. The cement plastering, though sometimes unsightly at first, improves in appearance with age and use. The iron work for the stalls can be painted any color desirable, but it is well to brighten them with aluminum, which is light in color, and though more easily rubbed off than paint, is more easily renewed.

The plumbing for the cow barn is very simple and has been worked out to a perfectly satisfactory solution. All

bell traps should be extra heavy and well galvanized. The ordinary cast-iron trap rusts and is a nuisance. The soil line from all bell traps should invariably be of heavy iron pipe. Outside of the building tile pipe may be used, but it is poor practice to use this within the building. The soil lines from the gutters should run to an outside mason's trap, and this line can take the outlet from the trough and the bell trap in front of the trough. The outlet to the watering trough should always



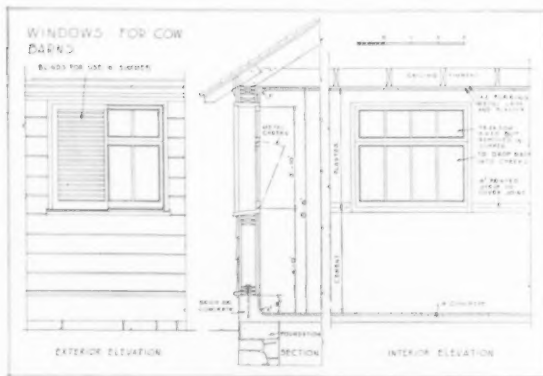
Plan of Farm Buildings, Red Bank, N. J.
E. Harris Jones, Architect.

*The first paper on this subject appeared in THE BRICK-BUILDER, March, 1914.

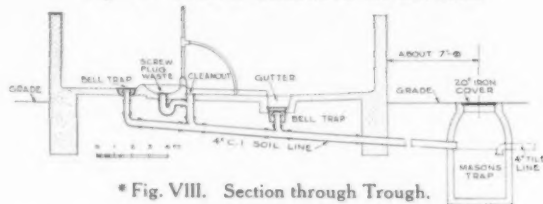
be trapped. This outlet should not be less than 4 inches in diameter, and a deep seated plug is necessary to keep the cows from pushing it out. Fig. VIII will make this clear.

The leaders to the building should never be connected to any soil line, as a stoppage at the end of the leader line will cause the water from the roofs to back up and empty itself through the nearest bell trap on the stable floor. The leaders must always run into a separate system of their own. The supply at the end of the cow trough should never be less than 2 inches. Adequate outlets for hosing down should be had in all parts of the building.

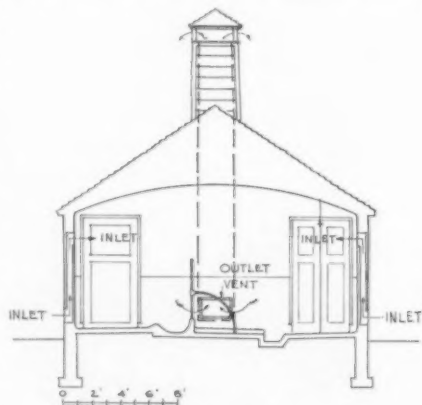
The subject of ventilation is a prime one, for no matter how carefully an architect may plan his ventilating system, it is almost impossible to find cattlemen who will take the trouble to acquire sufficient knowledge to use it intelligently. The theory of all exhaust systems of ventilation is to take the air out at the bottom of the room and let it in at the top. This management of the air currents creates a circulation absolutely necessary for ventilation. Professor King has worked out for the stable a system of ventilation which is generally known by his name. The outlet vents are seldom made less than 2 feet square, which gives an area of 4 square feet, and this is considered sufficient for twenty cows. This duct ought to be 30 feet from the floor of the cow barn to the top of the duct. If lower, this ratio must be increased. This duct can be in one end of the cow barn as shown in Fig. IX, which is the best place for it in a small stable, with a single row of cows. In a stable with a double row of cows an excellent contrivance is an outlet duct of the sliding type which will come down in the central passageway, where it is placed at night when ventilation is most needed, and in the daytime is pushed up to the ceiling. Additional outlet ducts may be run from the side up the slant of the roof and into the ventilator on the roof as shown in Fig. X.



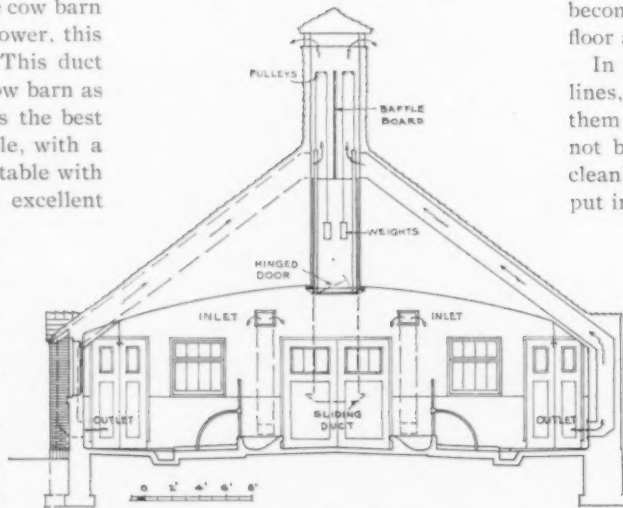
* Fig. VII. Detail of Windows for the Cow Barn.



* Fig. VIII. Section through Trough.



* Fig. IX. Outlet Duct at End of Barn.



* Fig. X. Outlets at Sides Terminating in Central Ventilator.

* Reproduced from "Modern Farm Buildings," by Alfred Hopkins. McBride, Nast & Co., Publishers.

The inlet ducts should be placed so that they are equally distributed, and their combined area should be equal to the area of the outlet vent. The inlet vent should be open at the bottom on the outside and at the top on the inside. This prevents the air blowing directly through it into the building, as would be the case if the opening on the outside was opposite that on the inside.

There are differences of opinion as to artificial heat in the cow barn. There is no doubt that heat is desirable on very cold nights. The great trouble with using artificial heat is that the stableman is liable to keep the barns at a temperature com-

fortable to himself, which is too warm for the cattle. The barn should never be heated to over 55 or 60 degrees Fahrenheit. The great advantage of artificial heat is seen in the ventilation. It allows the taking in of a greater amount of fresh air without chilling the stable. Artificial heat, then, should always mean more ventilation, not less.

The most satisfactory way to remove the manure is by overhead trolley, and the track should be hung 2 feet back of the gutter, which brings the carrier in exactly the right position for convenient transfer of the manure from the gutter to the carrier. The carriers are much better and cleaner than the old system of the cart, the wheels of which, if they become foul, grind the dirt into the floor at every revolution.

In laying out the manure trolley lines, it is frequently desirable to take them through the feed room. It must not be supposed that this is an uncleanly process, as the manure once put in the carrier stays there and the car and contents can pass through the feed room without fouling it. It is almost always more direct to trolley through the feed room than to go around it, and it is well to remember that simplicity in doing the work throughout the whole group of farm buildings is the most important factor in having it well done. While the horse manure

and cow manure can be tracked to the same ultimate place, the cow manure should not have to go through the horse barn to get there, or *vice versa*.

The place for unloading the carriers should under no circumstances be near the milking cow barn, but as far away as possible. All manure draws flies; horse manure breeds them. Absolute cleanliness in this regard is important, for the milking barn can have nothing dirtier in it than the fly. The openings through which the manure trolleys pass should never be narrower than 4 feet, and the trolley will not run on a track whose curve has a radius of less than 3 feet.

Many farmers prefer to save the liquid manure, and in order to do this, it is necessary to conduct the drains from the gutters in a separate line to the liquid manure pit. All other floor drains should be taken out of this line. In large herds, say forty milking cows or upwards, it is always desirable to collect the liquid manure in a separate pit. In computing the capacity of the liquid manure pit, it is well to allow about 400 gallons per cow.

Wherever possible, all the stable's sliding doors should invariably be used in preference to swinging doors. Swinging doors are a nuisance in a stable. The large hay barn door may sometimes



View from Cow Yard.



Ground Floor Plan.

Farm Buildings of S. T. Peters, Islip, L. I.

Alfred Hopkins, Architect.

swing out, but even here the sliding type of door is better. It is necessary to have a heavy stop for all sliding doors, which can be admirably made upon the floor in concrete, as shown in Fig. XI. All outside doors are best glazed, so they will let in as much light as possible; and inside doors should be glazed as well, as it is convenient to see from one compartment to another. No door

for cattle should be less than 4 feet in width, and a 6-foot door will enable two cows to go out at a time. The lower half of a Dutch door should be 4 feet 6 inches high for horses and 3 feet 8 inches high for cows. All Dutch doors should open out and hook back flat against the building. All door frames occurring in rooms with concrete floors should have their frames cut off 6 inches above the floor, and the form of the frame carried out in concrete.

Doors are made 7 feet 6 inches high for horses, 7 feet is high enough for cows; the large hay doors are usually made 12 feet wide and 14 feet high. In machinery rooms, for the storing of farm machinery, doors 8 feet wide by 8 feet high are usually sufficient.

With regard to the other buildings of the farm group, the hay barn is perhaps the most interesting to the architect, as it is the largest structure and dominates the group. There is no feature to this building which is specially important, except that it be framed in such a manner as will allow the hay fork to run continuously from one end of the building to the other. Fig. XII shows the detail of the framing as it is usually carried out, and is sufficient for all spans under 50 feet. The trusses should be placed from 14 to 16 feet on centers. It is also quite practicable to fill the hay barn from either one or both ends, in which case the hay track is projected through the end of the building some 8 feet and a door not



Garage on Estate of S. T. Peters, Islip, L. I.



Left Wing of Group.

smaller than 6 feet wide and 8 feet high is located just below it. This door is best hung to slide down, and should be weighted with counterweights. The proper ventilation of the hay barn is necessary, and in addition to the usual central ventilator, louvres should be placed underneath the eaves and at the gable ends. These should be arranged to be closed with batten doors in the winter time. In computing the capacity of the hay barn, it is usual to allow for each animal two tons of hay per annum, and for every ton of loose hay, 500 cubic feet of space. Baled hay takes up approximately one-third the room which loose hay does — 150 cubic feet per ton of baled hay as compared with 500 cubic feet per ton of loose hay. Baled hay has the immense advantage of greatly reducing the fire risk, as it will not burn, while there is scarcely anything more inflammable than loose hay in bulk.

The farm stables should include a general wagon room, where the better class of vehicle may be kept; the horse stable, a place for harness, either in the stable or in a separate harness room, and for the farm wagons ample accommodation in the way of sheds, a machinery room, and tool room. The wagon room is an enclosed room for an express wagon, farmer's buggy, etc. It is well to have a chimney in this room, so that a stove may be used in the winter. This is the only room of the horse department of the farm barns which need be heated. It should never be less than 24 feet in depth, and 30 feet in width is a minimum dimension. In planning for a number of vehicles, it is usual to allow 7 feet for the width of each wagon and 11 feet for length. In close placing of many wagons, it is possible to get the average width down to 6 feet 6 inches per vehicle. There

should always be a place for washing the wagons in the wagon room, preferably opposite the entrance, and for convenience there is nothing equal to the overhead washer.

In the horse barn, as in the cow barn, all mouldings or projections of any kind should be avoided. The horses may be arranged in double or single rows. The single row of stalls is very much better, as it enables one side of the stable to be thrown open to the sun and air. The type of stabling which has a passage in front of the stall, though requiring a larger building, is an excellent idea, giving more ventilation and comfort for the animals than any other kind. It keeps the horses away from the light, which frequently blinds them, and makes a cooler and better lighted stable. The windows in the horse stall where the stall is against the outside wall should never be lower than 6 feet 6 inches.

The manure trolley is advisable in the horse stable, and the ventilation should be carefully worked out as in the cow barn. Usually a high ceiling for the horses is desirable. The gutters to the stalls are always shallow and their corners rounded, exactly the reverse of the cow stall gutters, and, above all, open, for the covered gutter is hard to keep clean.

The simplest possible stall partition is merely a pole hung between the animals.

This has been used in England for a long time, but it seems impossible to adopt such a stall here. The rigid stall partition is consequently generally used. The stalls are usually 9 feet in depth,



Ground Floor Plan.
Farm Buildings of Percy R. Pyne, Esq., Bernardsville, N. J.
Alfred Hopkins, Architect.

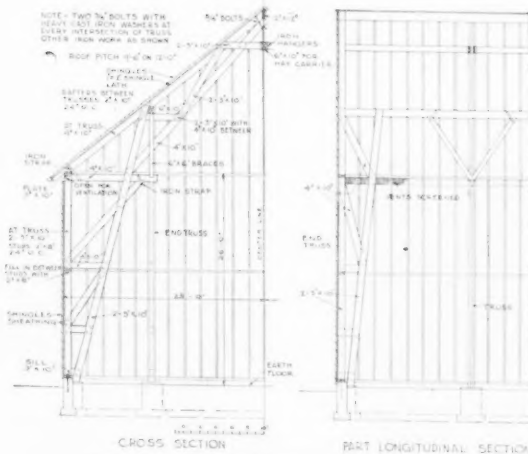


Entrance to Hay Barn Opposite Yard.

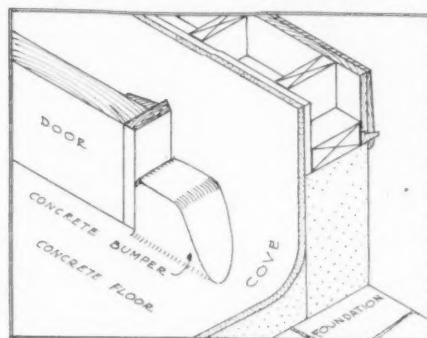
though a shallower stall of 7 feet answers all requirements and allows more of the horse to be seen. Stalls can vary from 4 feet 6 inches to 5 feet in width, and there is nothing in the superstition that a horse will cast himself in a stall which is between 4 feet and 5 feet wide. Where few horses are provided for, there is no stall equal to the one 6 feet in width. A 6-foot stall is wide enough to allow cleaning or harnessing the animal in it. Hay is best fed upon the floor, and no hay rack is necessary.

The farm horse usually does well on a concrete floor, but where there is a prejudice against it, the wooden slat floor with an iron pan below is the best type. The pans should be connected with the water system so that they can be flushed out. Stalls with wooden slats have the advantage over the concrete, that the urine drains out of them more quickly, and the bedding is drier in consequence. A cork brick for the floor is frequently used, and while it does not drain off as rapidly as the slat floor, it is warmer than the concrete and is to be preferred on that account.

A feed room for the horse stable is desirable. It is better to have all hay and grain come into the feed room in preference to the stable. The practice of storing hay above the horses, and throwing it down into the stable through the ventilator, is bad.



* Fig. XI. Detail of Framing for Hay Barn.



* Fig. XII. Isometric View of Bumper.



Ground Floor Plan.

Farm Buildings of Clifford Brokaw, Esq.



Farm Buildings of Clifford Brokaw, Esq.

Alfred Hopkins, Architect.

* Reproduced from "Modern Farm Buildings," by Alfred Hopkins. McBride, Nast & Co., Publishers.

If hay has to be kept over the horses, it is better to have no communication between the hay loft above and the stable below.

A shed is a place for the storage of all farm wagons, carts, extra tongs, shafts, and the various things valueless and valuable which accumulate in the practice of agriculture, and in any farm group, no matter how large, there is seldom shed room enough. The shed should never be less than 24 feet deep, and the supports for the roof are best as few and as far apart as possible.

The shed need not be over 9 feet in height, and 8 feet 6 inches is usually all that is required under average conditions. It is inexpensive and often desirable to have a loft over the shed for general storage. The hay barn can be made high enough to store the hay in a second story, leaving the space below for shed room, and in small farm groups this is an economical way of obtaining such space.

In connection with the shed and generally at one end of it a convenient place is found for the storage of all farm machinery, which is used only for a short time during the summer, and when not in use, is best kept under cover in an enclosed room. It is similarly desirable to provide a small room for the storage of tools, hoes, rakes, spades, and other small farm implements.

The Professors and the Profession.

By ALBERT KELSEY, F.A.I.A.

I HAVE hesitated over the selection of a title for this paper, feeling, after having listened to a discussion which took place recently before the Philadelphia Chapter A. I. A., on the relation of the profession to the schools, led by Professor Laird of the University of Pennsylvania, and debated by Mr. C. C. Zantzinger, chairman of the Institute's Committee on Education and by Mr. Henry Hornbostel, that it should have been "The Profession vs. the Professors," or even "The Profession without the Professors," though I confess no revolutionary ideas, such as these tentative titles convey, ever occurred to me until then, having, on the contrary, theretofore felt that these two groups of sincere and ardent workers were supplementing one another's endeavors in perfect harmony. And even now, notwithstanding the eminence of the debaters and their divergent and startling points of view, I mean to ignore any spirit of rivalry or antagonism which may exist, still believing, as always, that for the average student regular and methodical instruction by a well-organized and permanent staff is better and productive of surer results than any intermittent, offhand teaching, no matter how brilliant, by architects in active practice. On the other hand I cheerfully concede that the presence of an architect, now and then or at regular intervals in the lecture room or leading a criticism is much to be desired. But I cannot for a moment admit that such a man's time, for such fragmentary and often too uncoordinated instruction is worth more than that of a professor permanently in charge. To make such a claim in comparison with the services of a professor who has patiently and laboriously built up, watched, and studied a school's growth, day by day, and month by month, for years is obviously absurd.

At the meeting of the Philadelphia Chapter referred to, Professor Laird felt that the profession was not doing as much as it might for the schools, while strange to say, no one rose to ask what the schools were doing for the profession in the sense of educating the public, establishing ideals, and raising standards. Indeed, both factions seemed to regard these institutions as mere training schools for the young, overlooking the possibility that from such an eminence a certain impartial, contemplative, and scholarly influence might radiate and exert a potent influence upon both the public and the profession.

There were occasional flashes of idealism in Mr. Hornbostel's remarks, though on the whole he took a sordid practical point of view, admitting that the schools were at last turning out excellent draftsmen, though giving but grudging credit to the pedagogues for this result, and by way of constructive criticism thought that the schools might increase their usefulness by a greater liberality in the conferring of honorary degrees.

Mr. Zantzinger who, recently in the discharge of his official duties had made a tour of inspection of the leading schools of architecture, referred to "instructors more or less incompetent" and to the growing practice of "importing Frenchmen with foreign points of view" to teach design, and made several thoughtful recommendations,

the most radical being that the schools should extend the length of their courses and that the teaching of design should be confined to American architects in actual practice, like Mr. Hornbostel.

In short to meet the commercial and intensive demands of the day seemed both the burden and the limit of desire of both factions. They said not a word about architecture as a fine art — architecture that will endure. Nor did they even refer to real architecture, either commercial or spiritual (I use this last word in the French sense), but confined themselves to paper architecture, — training on paper, — to the plan-factory and competition-mill, and to bigger and stronger schools in which to grind out more, quicker, and sharper draftsmen to feed into omnivorous office hoppers where whole departments are set aside for gladiatorial competitions, and where the architect himself often says, "the execution of buildings is left to the office, that does not interest me."

Now, in all this I see a splendid opportunity for some school to try and stem the tide. Dr. Laird explained that it had taken twenty years for the schools to get their pace, and now having got it, let us inquire what one might do, on its second wind. The machine being on a good going basis, those in charge now have time to look about for new worlds to conquer and, moreover, time to estimate, with a fair degree of accuracy, the esteem in which their graduates are held by the general public. In short, how does the public rank an architect? Usually as a more or less incompetent business man; often as an impractical dreamer, but seldom as a practical artist. I think this is both the usual point of view and a very just point of view. Well, "the public be damned." Let us seek the judgment of the cognoscente, let us go to art circles and to realms of intelligence, where certainly we will get our due. Surely that will be the great test; and what do we find? That the oldest and most active Academy of the Fine Arts in the country is unappreciative as are the directors and curators of most of our other art schools and museums; while the authorities of the next great World's Fair have deliberately and purposely ruled to exclude an architectural exhibit from the Department of Fine Arts! Likewise college presidents, litterateurs, editors, musicians and actors, and other thoughtful men do not seem to appreciate us. This is all very sad but there must be a reason for it. Perhaps it is because the profession has not made good, or perhaps it is because there is no disinterested and recognized authority to speak for us. Let us pursue this comforting thought. Possibly if in one or more of our colleges there was a professor of architecture unhampered by the desire to follow the wishes of a money-making profession, if there was a man thundering truths against the commercialization of architecture to the entire nation, while extolling "the glory that was Greece and the grandeur that was Rome" through the medium of the best popular magazine and from the lecture platform (a fully accredited professor doing as much to popularize good architecture as an Elmdorf or a Burton Holmes), a public sentiment might be formed and an incentive for more beautiful and

more finished architecture might be created, thereby making some worthy practitioners deserving of the consideration they now expect but seldom get.

A Charles Elliott Norton, a Goldwin Smith, a modern John Ruskin or a Dr. Elliot commanding the confidence and respect of the public because of his academic position and rugged independence would exert an authority and an uplifting influence no organization of practicing architects could hope to equal. Why? Because talking down from the heights so far removed from the possible job-getting and possible job-giving world, he would command an attention and a respect which is given only to those who are intelligent, sincere, and absolutely disinterested.

It may be that it will require a retired architect, who has been used to meeting the fierce conditions of actual practice, used to real architecture, as well as paper architecture; who understands climatic conditions, who knows materials and the action of the weather upon them, who understands their artistic juxtaposition and treatment; who knows besides the theory of ornament, the right tricks of undercutting and high lighting, and other variations necessary for the successful and effective use of a well known classical motive in different positions and under different conditions; who understands color and especially the difficulties and differing conditions to be fought when using stained glass, etc. Who, in short, is equally a cosmopolitan in the use and knowledge of all the styles, as in the use and knowledge of all the crafts. It may be, and perhaps is, expecting too much of a pedagogue to know and feel and insist upon all the refinements that went into the work of classical antiquity and that also goes into the best work of to-day, but at least he can lead his followers, in and out of school, in the right direction. Surely, without holding himself too much aloof he can maintain his dignity and keep constantly in touch with the active work of the profession. He can continue to advise those about to build, cautioning them in no uncertain terms that the finest architecture is not as apt to result from a competition as by direct appointment; and then, if overruled, he can point out, very clearly and firmly, that many of those who are best at winning competitions are not always best at executing buildings! That, therefore, limited competitions are desirable, but not only limited in the present recognized sense, but more especially that they should be limited — for instance, to architects who have not more than two or three partners-of-convenience in widely separated cities, to architects with permanently established offices, and to those whose competition-mills are not taxing the faking capacity of their "hands" by "manufacturing" too many competitions at one and the same time. Also a thoughtful college professor once having reached the necessary eminence, will not be required to give much time to mere routine school work, but will have leisure, and above all the eager desire and keen wish to visit and study the buildings already executed by those he proposes to invite; and will examine their buildings with such care as to know without any possibility of doubt whether the execution is better or worse than the original drawings promised, whether they have settled or cracked, whether they are good in detail and color, texture and finish, and above all whether the "winning partie" has been adhered to and if so how it suits the actual needs of those using it. He will make up his mind whether a

genius capable of designing and building a stupendous stunt, dwarfing a state capitol, and throwing a whole city out of scale is really serving the community to the best advantage, and so on, *ad infinitum*.

Proud of his influence and renown, his university will give him his sabbatical year abroad, so that he may refresh himself also by actual contact with the best the past has produced. Thus once every seven years he will come home more and more convinced of the fact that the bulbous domes, tapering towers, fair temples, and wondrous tombs of the Mogul Empire still display an exquisite perfection of workmanship and an infinite variety of design which is neither taught nor practiced to-day; that the almost unknown ruins of Indo-China disclose grand flights of imagination, a type of architectural sculpture, a richness of ornamentation, a truly fine contrast in scale, a nicety of construction neither taught nor practiced to-day; that the mosques and minarets of Mohamet, strewn the length of the Mediterranean, still plainly show evidences of patient study and careful execution neither taught nor practiced to-day; while classical antiquity with its more exquisite art — which we profess however to venerate, study, and emulate; he will then see that in reality, as it is at present taught, furnishes us with only a box of tricks, or a book of rules which we use in the same uninspired manner we use a Carnegie handbook, or a building trades pocketbook. He will see with horror that we are willing to take it all for granted, and swallow it whole, without understanding or appreciation. And, moreover, that there really is a chance for the pedagogue to kindle the flame and keep it burning for the benefit of the public, the refreshment of the profession, and the inspiration and enlightenment of the student.

Then perhaps he will devise a way to make his advanced students see as he sees, and feel as he feels — by requiring them to study classical forms in a dark room — by passing their hands over certain casts and describing what they feel; so that they may thereby become excited and aroused to some real understanding of Greek refinement, and the true spirit of Greek art; thus teaching that purity of form is not limited, nor archaic and obsolete, but universal and eternally young.

As to his particular concern for the undergraduate body and scholarship holders at home and abroad, he will give them incisive and searching criticisms on the work of the day, pointing out its promise and its failures, in vivid unforgettable terms; and will himself come to the conclusion that the great demand of the day, as well as for so long as this country continues to grow and prosper, will be for a utilitarian and more or less commercial architecture. And then he will gradually rearrange his courses so that the three or four year courses, and special courses, shall only be courses in commercial architecture; so that those continuing for two or three years longer, either at college or under its influence in travel, study, and research, either at home or abroad, alone shall get the most coveted degree of all — that of architect! Thus by this or some similar method he will establish in the eyes of the public, what to my mind is the matter of very greatest importance to-day, viz., that there are architects and architects.

While I have great respect for the opinions and sincerity of the gentlemen who took part in this debate, I do not at all agree that a more promiscuous distribution of degrees

will in any way help present conditions. True, we find common ground in the fact that there are already too many young architects honored with degrees of the dental and veterinary caliber, but differ as to the proper number of elderly practitioners to be singled out and honored. It being my contention that already some have been so honored beyond their deserts; which prompts me to remark, *en passant*, that I once heard some cultivated college graduates in an exclusive club say that they could not see why an architect should receive a degree any more than a policeman! Special point is given to the story by the fact that they were referring to a Ph.D. which had that day been conferred on the late Charles F. McKim, the most conscientious and most highly cultivated architect our profession has thus far produced; showing conclusively that a truly great architect and his work meant little, if anything, to a rather superior group of men.

Now, I contend, it is for the college professor, first through the students and the faculty, and then through the press and the public, to create a better general understanding of what an architect really is; and if such a cult or caste as I have suggested could be created, made up of men thinking in different terms from those in the commercial group—an aristocracy of architects whose attainments would be understood and respected by all men of education—then the degree of architect would mean much; but so long as the present promiscuous system of associat-

ing obscure and rapacious commercial architects with brilliant soldiers-of-fortune prevails and is encouraged by those in charge of our leading schools, and so long as one and the same office produces buildings of varying standards, good, bad, and indifferent, according to the ability of the designer temporarily employed, or according to the pressure put upon the office and the eagerness of its chief to expand business, so long is it going to be impossible to impress the public with the sincerity of architects and to fool the people into believing that we are "holier than thou" artists and scholars, untainted by the commercial rapacity of the age. If, however, the heads of the principal schools will set about to produce highly trained artists and scholars—uncompromising and stanch—then within a short time we shall have a select group of architects, peculiarly fitted to design and execute the great religious and secular buildings of a new land, whose names will live long after we are dead and gone, not because of the volume of work they produced nor the recognition they exacted, but because of their steadfast and patient and self-sacrificing devotion to an ideal. And it is only because such men in the past lived and struggled, that we of to-day can raise our tired, jaded eyes to gaze, now and then, here and there, upon a truly sublime structure which, the more frequently we view it and the better we know it, awakens in us an ever-increasing feeling of restful awe and genuine admiration.

EDITORIAL.

A FEW months ago we brought to the attention of our readers the general dissatisfaction which is felt with present methods of estimating and their resultant effect on competitive bidding, calling attention at the same time to the efforts which are being made to establish an American System of Quantity Surveying, which it is claimed will be effective in bringing about better conditions of estimating, equally beneficial to owner and contractor. We published in recent issues of THE BRICKVILDER expressions of opinion from chapters of the American Institute of Architects and from individual architects, which came to us as a result of our presentation of this subject. Their letters indicated that they recognized the need for improved methods in estimating, and that they were agreeable to welcome and further any sincere efforts which were made to attain this end.

The advocates of the Quantity System are constantly enlarging their sphere of influence, and as the advantages to both owner and contractor become more apparent they are arousing the interest and securing the support of the architectural profession. This is, however, as it should be, for architects should be eager to support and adopt any measure which will effect a clear and just understanding between owner and contractor. In the architect's professional employment he assumes the unique and exceptional legal combination of an agent for the owner and at the same time arbitrator between the owner and the contractor. Such an exceptional duty makes the offices of an architect particularly difficult, and it is evident that anything which can be construed to lessen the difficulties which may arise in the fulfilment of his duties should be warmly welcomed by him. It is easily acknowledged that the chief disputes

which arise between owner and contractor, and which require arbitration on the part of the architect, are due to misinterpretation of what the contract calls for, and in the settlement of charges incurred by extra work which are due in some cases to omissions in specifications and other causes directly chargeable to the architect, and in others of equal frequency, to express desires on the part of the client to include other items than those in the original contract.

The first reason for such misunderstandings, however, the Quantity System of Estimating as proposed would remove, for before completing the bill of quantities all omissions and other defects would be determined and cleared up, with the result that the documents when they reach the contractor will be as complete and accurate as it is possible to make them.

It is not so with plans and specifications, which may be, and often are, contradictory and capable of two or more interpretations. In such cases the bidder has forced upon him a condition which causes and encourages guesswork methods, as to what another person has in his mind, as to what he really means by certain lines and words, and occasions often arise when it is difficult, if not impossible, to determine what the true intention is until perhaps after the estimate has been submitted.

The bill of quantities carefully prepared will entirely remove this dangerous element of chance. It should be furnished to each bidder and contain everything which is essential for the contractor to have when making up his figures. It should be prepared by efficient men whose competency and integrity have been assured, and should further be guaranteed by them and made the basis of the contract equally with the drawings and specifications.